

Tepanil Ten-la (continuous release form)

(diethylpropion hydrochloride)

works on the appetite not on the nerves'

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety,

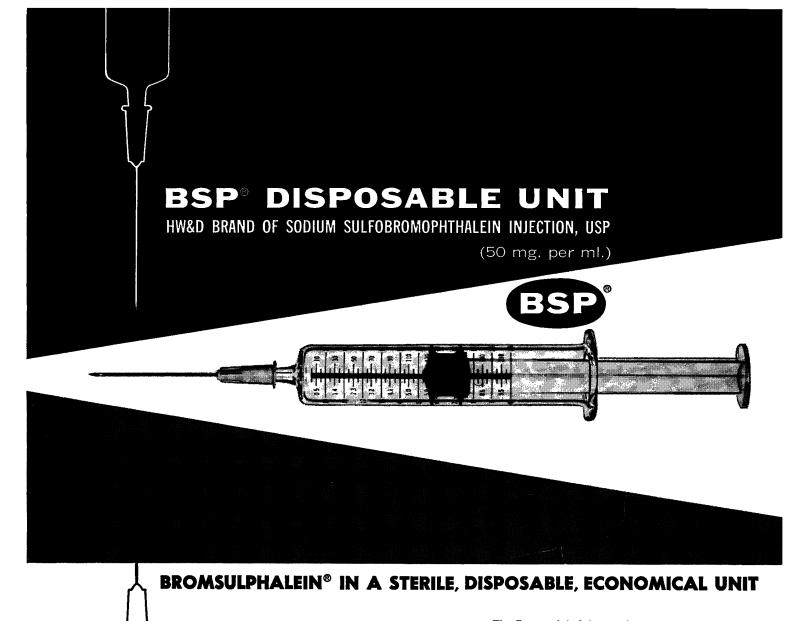
and iltteriness. In contrast, CNS depression has better parted. In a few epileptics on increase in convulsive episodes has been reparted. Sympotheminetic cardiovascular effects reported include ones such as lacingcardia, precordial pain, arrhythmia, polpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastraintestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfart have been reported. Specific reports on the hematopoletic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tob tablets. One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-0054 A1/70 / 8-4. PATERT NO. 3.001.810



THE NATIONAL DRUG COMPANY DIVISION OF RICHARDSON MERRELL INC. PHILADELPHIA PENNSYLVANIA 19144



The Bromsulphalein test is a convenient, sensitive, reliable test of liver function.

The precalibrated syringe contained in the BSP Disposable Unit makes weight calculations unnecessary, providing proper dosage regardless of patient-weight. Each unit contains complete directions for use, precautions and contraindications.

The all-inclusive BSP Disposable Unit provides economic unit dispensing.

Complete literature available on request.

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Baltimore, Maryland 21201

(BSPG4)



relieved with MEASURIN q. 8h. dosage

Double-strength Measurin timed-release aspirin offers a new kind of control for your arthritic patients. Each 10-grain tablet has over 6,000 microscopic reservoirs that release aspirin at a controlled rate—some right away and some later on. This means—fast relief, followed by long lasting relief. Throughout the day, Measurin gives your patients freedom from a 4-hour dosage schedule. Measurin can help your patients get a good night's sleep, uninterrupted by the need for an extra dose of aspirin. And, taken at bedtime, it also helps ease morning joint discomfort and stiffness.

For Professional Samples write: Breon Laboratories Inc. Sample Fulfillment Division P.O. Box 141 Fairview, N.J. 07022



BREON LABORATORIES INC.

90 Park Avenue, New York, N.Y. 10016 Subsidiary of Sterling Drug Inc,

MEASURIN TIMED-RELEASE ASPIRIN

ECONOMICAL • EFFECTIVE • LONG LASTING PAIN RELIEF Dosage: 2 tablets followed by 1 or 2 tablets every 8 hours as required, not to exceed 6 tablets in 24 hours. For maximum nighttime pain relief and to help relieve early morning stiffness, 2 tablets at bedtime.

Available: Bottles of 12, 36 and 60 tablets.

IN ASTHMA IN EMPHYSEMA



THE mudranes

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. MU-DRANE tablets contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. Dosage is one tablet with full glass of water, 3 or 4 times a day. Precautions are those for aminophylline-phenobarbital-ephedrine combinaations. Iodide side-effects: May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. Iodide contraindications: Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). MUDRANE-2 tablets contain 195 mg. potassium iodide; 130 mg. aminophylline. Dosage is one tablet with full glass of water, 3 or 4 times a day. Precautions are those for aminophylline. Iodide side-effects and contraindications are listed above. MUDRANE GG tablets contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. Dosage is one tablet with full glass of water, 3 or 4 times a day. Precautions are those for amino $phylline-phenobarbital-ephedrine combinations. {\color{red} {\bf MUDRANE}}$ GG-2 tablets contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. Dosage is one tablet with full glass of water, 3 or 4 times a day. Precautions: Those for aminophylline. MUDRANE GG Elixir. Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. Dosage: Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with 1/2 to full glass of water. Precautions: See those listed above for Mudrane GG tablets.

MUDRANE—original formula

First choice

MUDRANE-2

When ephedrine is too exciting or is contraindicated

MUDRANE GG

During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2

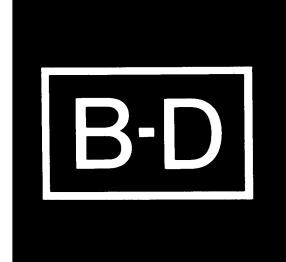
A counterpart for Mudrane-2

MUDRANE GG ELIXIR

For pediatric use or where liquids are preferred

Clinical specimens available to physicians.





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PLASTIPAK

INSULIN SYRINGE/NEEDLE UNITS

Send samples to:

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Now you can lower the risk of insulin error when your patient is



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Becton-Dickinson and Company Consumer Products Division P.O. Box 183 Fairview, New Jersey 07022



color-coded caps and numbersred for U40, green for U80

easy-to-hold, easy-to-handle even for child diabetics with small hands or adults with stiff fingers

pocket-or-purse portable sturdy from tip to top

single-scale
PLASTIPAK
insulin syringe
needle units
eliminate
the hazard
of reading
the wrong
scale

low cost-barely pennies higher than old-fashioned disposable needles without syringe . . . about as low as a cup of coffee presterilized—consistently dependable, and sterility is assured until cap is opened

the sharpest needle your patient can buy—far sharper than any reusable needle

integral cannula reduces air

the first
insulin syringe
so low in cost
your patient
can use
a new one
every time

its single-scale—U40 or U80—minimizes the risk of measurement errors. Your patient can't read the wrong scale.

big numbers, wide spaces for easy reading

Supplied: in packages of 10— PLASTIPAK syringe U-40 (red) or PLASTIPAK syringe U-80 (green) Prescription required in most states.

BECTON BODICKINSON

Consumer Products Division Becton, Dickinson and Company Rutherford, New Jersey 07070 **U40**

1180

No G.L. Intolerance With Bufferin for most Arthritics.

Hospital records showed that rheumatoid arthritics were 2½ to 9 times more prone to gastrointestinal intolerance with plain aspirin than the general patient population.¹ A two-part study reported in an article¹ in the Journal of the American Medical Association investigated this problem to determine if Bufferin® would be better tolerated by arthritics.

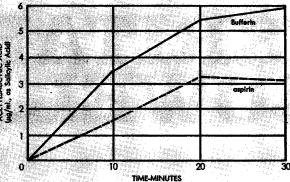
The first part dealt with 37 rheumatoid arthritics with proved intolerance to aspirin. In a double-blind crossover test, alternating regimens of aspirin and Bufferin (2 tabs. 4 times a day while awake) were administered. Of the 37, twenty-six responded to Bufferin without significant gastrointestinal problems. In the second part, 25 of these same 26 arthritics participated in a long-term management study using Bufferin.

In this single-modality test, 24 out of 25 arthritics with proved aspirin intolerance took a regimen including Bufferin* (2 tabs. q.i.d.) from 4 to 18 months with no significant gastrointestinal distress.

THAT'S 96% WITHOUT SIGNIFICANT STOMACH UPSET.

Achieve higher pure acetylsalicylic acid blood levels faster with Bufferin.





In a series of tests, 2 blood levels were measured which compared Bufferin with plain aspirin. In the first critical minutes, Bufferin produced blood levels of pure acetylsalicylic acid averaging almost twice those of plain aspirin.

Bufferin can give arthritis sufferers the benefit of higher pure acetylsalicylic acid levels faster. And without undue risk of gastrointestinal problems.

Composition: Each tablet contains aspirin 5 Cir., and the antacid Di-Alminate® (Bristol-Myers' brand of Aluminum Glycinate and Magnetium Carbonate).

"Majority of patients studied received long-term therapy consisting of physiotherapy, dietary adjuncts, and in some instances, gold salts.

1 Fremont-Smith, Paul, JAMA, 159:386-388, June 4, 1955.

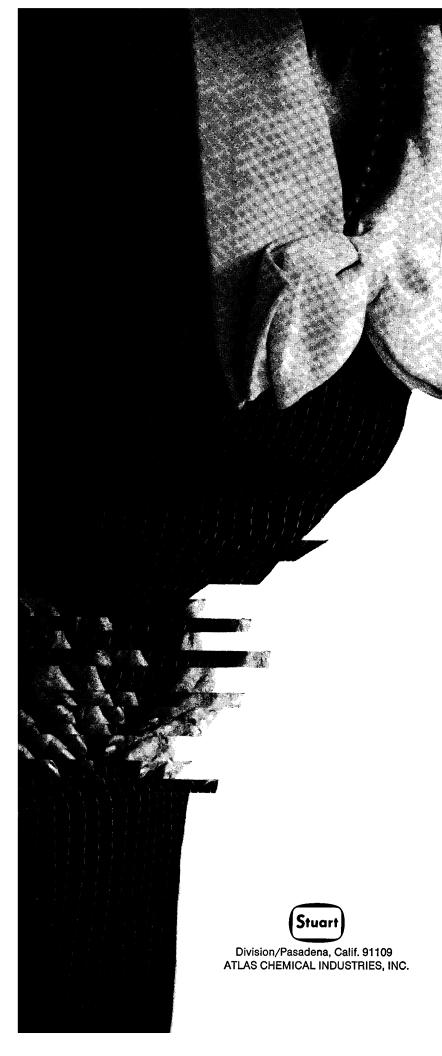
2 Truitt, Edward B., Jr., and Morgan, Ann M., Journal of Pharmaceutical Sciences, 54 No. 11:1640-1646, 1965.



Now...more completely controlled with

KINESED

antispasmodic/sedative/antiflatulent



KINESED°

☐ With belladonna alkaloids—for the

hyperactive and spastic bowel

- ☐ With phenobarbital—for associated anxiety and tension
- ☐ With simethicone—for accompanying gas discomfort

Composition

Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Contraindications

Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions

Administer with caution to patients with incipient glaucoma, bladder neck obstruction. Prolonged use of barbiturates may be habit-forming.

Side effects

Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage

Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.



"Wouldn't a maxi be less revealing, dear?"

Each OBETROL-10 tablet contains: Methamphetamine Saccharate 2.5 mg.; Methamphetamine Saccharate 2.5 mg.; Methamphetamine Hydrochloride 2.5 mg.; Amphetamine Sulfate 2.5 mg.; OBETROL-20 tablets contain twice this potency) Pat. #2748052.

This combination of amphetamines may be useful as an adjunct in the management of certain forms of obesity where an appetite depressant is indicated.

Contraindications: Hypertension, advanced arteriosclerosis, coronary artery disease, cardiac arrhythmias, peripheral vascular disease, states of undue restlessness, anxiety, excitement, agitated depression, hyperthyroidism, idiosyncrasy to amphetamine, concomitant administration of a monoamine oxidase inhibitor. Precautions: Use with caution in individuals with anorexia, insomnia, vasomotor instability, asthenia, psychopathic personality, a history of homicidal or suicidal tendencies, and individuals who are known to be hyperractive to sympathomimetic agents, or emotionally unstable individuals who are known to be susceptible to drug abuse. Certain monoamine oxidase inhibitors may potentiate the action of Obetrol. Side Effects: The most common side effects attended with the use of amphetamines include nervousness, excitability, euphoria, insomnia, dryness of mouth, nausea, vertigo, constipation, and headache. Dosage and Administration: Initial adult dose is onehalf to one 'Obetrol-10' tablet daily, preferably onehalf to one hour before meals. This may be gradually increased to one 'Obetrol-10' or 'Obetrol-20' tablet one to three times daily as indicated. **Supplied:** Tablets scored, in bottles of 100, 500, and 1000.

REQUEST SAMPLES AND LITERATURE

OBETROL PHARMACEUTIC	ALS . BROOKLYN, N.Y. 11207
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CITY	STATE
SIGNATURE	

OBETROL PHARMACEUTICALS

Div. of Rexar Pharmacal Corp., Brooklyn, N.Y. 11207

PRO-LIFE FOR PROFESSIONAL CORPORATIONS

Group life insurance with tax deductible premiums

THE PRO-LIFE POLICY

\$50,000 of group life insurance program with tax deductible premiums and tax free benefits in the event of death.

Employees enjoy similar protection.

NO DUES TO PAY NO ADDED MONTHLY BILLING CHARGES

(Like some other group policies)

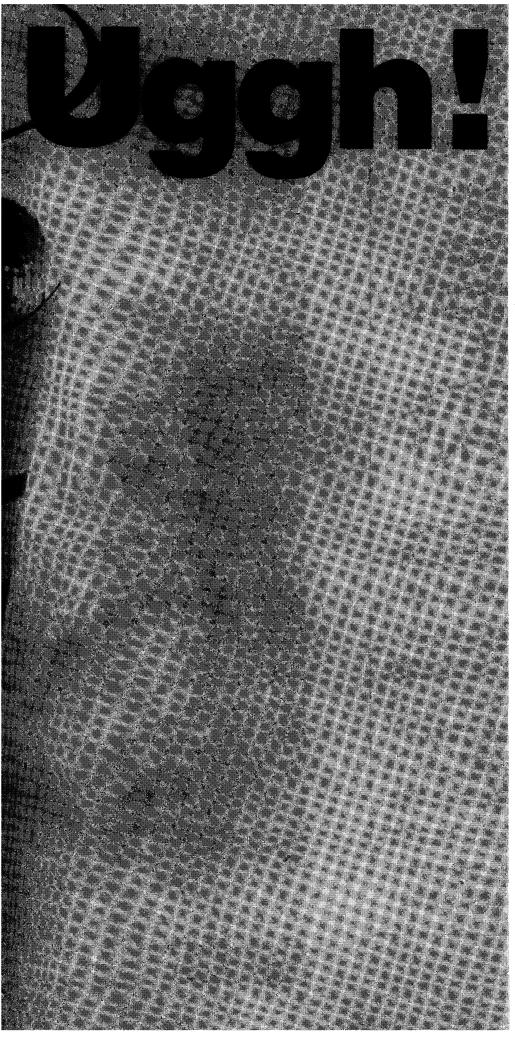
NO POLICY FEES

This policy is written under a Trust agreement executed for the benefit of the members of the various professions, who have incorporated under their applicable State laws.

There is a *Physicians Planning Service Corp. office near you and they will be happy to discuss all of your financial needs with you or write to us.

*offices in over 80 major cities





Potassium iodide is an outstanding mucolytic agent1-4 that usually tastes like rust on the rocks. Iodo-Niacin is unusual.

Few would quarrel with the mucusliquefying value of potassium iodide in acute and chronic bronchitis, asthma and emphysema. It's outstanding in freeing mucus plugs and strings. But the taste. Uggh! Give your patient lodo-Niacin and you give him the iodide benefits without the iodide taste. lodo-Niacin comes in taste-free tablets. Action is rapid and welltolerated.5,6 All that's missing is the uggh! Good riddance.

Iodo-Niacin® Each Slosol® coated tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg.

IOGO-Niacin® Each Slosol® coated tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg.

RESPIRATORY DISEASE: The use of lodo-Niacin is indicated wnenever an expectorant action is desired to increase the flow of bronchial secretion and thin out tenacious mucus as seen in bronchial asthma, and other chronic pulmonary disease. Iodo-Niacin has also proven of value in sinusitis, bronchitis, bronchiectasis, and other chronic and acute respiratory diseases where the expectorant action of iodide is desired.

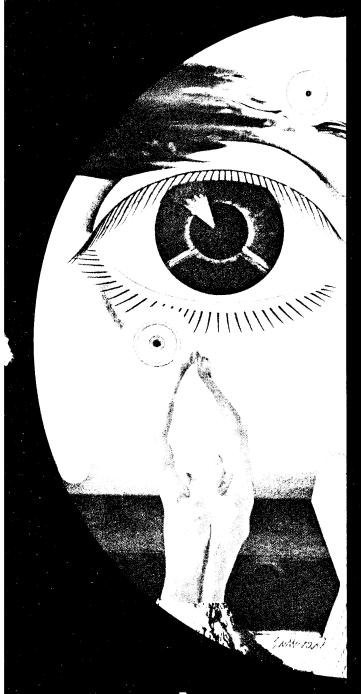
RATIONALE: The signs and symptoms of pellagra, bromism, and iodism are similar in many respects and have been postulated by some investigators to be caused by the same mechanism: poisoning of coenzymes I and II. These enzymes are vital to cellular oxidative metabolism and are essential in the Krebs' cycle. Nicotinic acid is specific for the therapy of pellagra. Its use in the prevention or treatment of iodism follows from the above postulation: a source of replenishment of the pyridine ring structure in coenzymes I and II. DOSAEE: THE ORAL DOSE FOR ADULTS IS TWO TABLETS AFTER MEALS TAKEN WITH A GLASS OF WATER. For children over eight years, one tablet after meals with water. The dosage should be individualized according to the needs of the patient on long-term therapy. SIDE EFFECTS: Serious adverse side effects from the use of Iodo-Niacin are rare. Mild symptoms of iodism such as metallic taste, skin rash, mucous membrane ulceration, salivary gland swelling, and gastric distress have occurred occasionally. These generally subside promptly when the drug is discontinued. Pulmonary tuberculosis is considered a contraindication to the use of iodides by some authorities, and the drug should be used with caution in such cases. Rare cases of golter with hypothyroidism have been reported in adults who had taken iodides over a prolonged periods. The signs and symptoms regressed spontaneously after iodides were discontinued. CAUTION: The causal relationship and exact mechanism of action of iodides of th

longed periods.

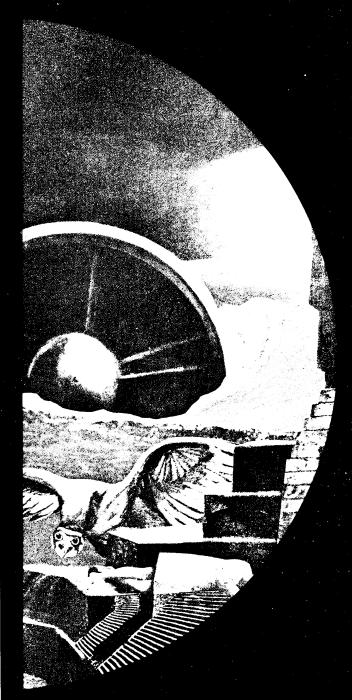
SUPPLIED: Bottles of 100, 500 and 1,000 Slosol

SUPPLIED: Bottles of 100, 500 and 1,000 Slosol coated pink tablets.
REFERENCES: 1. Modell, W., ed., Drugs of Choice, 1968-1969, pg. 435. 2. Carryer, H. M., and Henderson, L. L.: Postgrad. Med., 41:612, 1967. 3. Wells. Jr., R. E.: M. Clin. North America, 44:5, 1960. 4. Richerson, H. B.: Hospital Formulary Management, (Sept.) 1967. 5. Stern, F. H.: Psychosomatics, Aug. 15, 1968. 6. Abrahamson, Jr., I. A., et al.: E.E.N.T. Dig., July, 1968.

Pharmacal Co., Inc. St. Louis, Missouri 63108



First, there were tranquilizers for anxiety



Then, there were antidepressants for depression

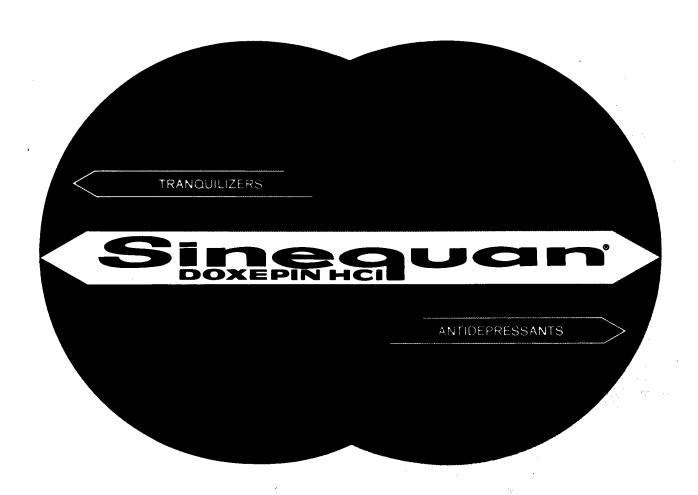
NOW, Pfizer Laboratories introduces

Sinequan[®] DOXEPIN HCII

The tranquilizer that is an antidepressant.

The antidepressant that is a tranquilizer.

The first single agent with potent dual action...active throughout the spectrum of psychoneurotic anxiety/depression



New Sinequan® (doxepin HCl)... in coexisting anxiety/depression

142 patients with symptoms of both anxiety and depression were treated with Sinequan—83% of the patients showed marked, moderate, or slight improvement.

TARGET SYMPTOMS	TOTAL	NO. OF PATIENTS IMPROVED	IMPROVEMENT MARKED MODERATE SLIGHT	% OF PATIENTS IMPROVED
anxiety/ depression	142	118	39 . 46 . 33	83%

In three double-blind studies comparing Sinequan and a fixed combination (perphenazine-amitriptyline), Sinequan was found to be at least as effective as—and in some cases more effective than—the combination.

New Sinequan... in prominent anxiety

238 psychoneurotic patients in whom anxiety was the most prominent symptom were treated with Sinequan —84% of the patients showed marked, moderate, or slight improvement.

		NO. OF PATIENTS	IMPROVEMENT			% OF
DIAGNOSIS	TOTAL	IMPROVED	MARKED	MODERATE	SLIGHT	PATIENTS IMPROVED
psychoneurotic anxiety	238	201	92	59	50	84%

In eight double-blind studies of Sinequan and either chlordiazepoxide or diazepam, Sinequan was always found to be at least as effective as—and in some cases more effective than—the tranquilizers in relieving symptoms of anxiety.

New Sinequan... in prominent depression

259 psychoneurotic patients in whom depression was the most prominent symptom were treated with Sinequan—81% of the patients showed marked, moderate, or slight improvement.

		NO. OF	IMPROVEMENT			7.05
DIAGNOSIS	TOTAL	PATIENTS IMPROVED	MARKED	MODERATE	SLIGHT	IMPROVED
psychoneurotic depression	259	210	106	72	32	81%

In five double-blind studies of Sinequan and amitriptyline, Sinequan was always found to be at least as effective as—and in some cases more effective than—the antidepressant in relieving symptoms of depression.

Data on File, Medical Research Laboratories, Pfizer Pharmaceuticals, Chas. Pfizer & Co., Groton, Conn.

Summary of clinical experience with Sinequan (doxepin HCI) in, Pitts, N.: The Clinical Evaluation of Doxepin—A New Psychotherapeutic Agent: Psychosomatics 10:164, May-June, 1969.

Adverse reactions:

Sinequan (doxepin HCl) is usually well tolerated, even in the elderly. Those side effects which do occur are generally mild.

Most frequently observed side effects
Drowsiness has been observed, usually early in the course of therapy. It tends to disappear as therapy continues.

Anticholinergic effects (including dry mouth, blurred vision, constipation) have been reported. They are usually mild and often subside with continued therapy or reduction of dose.

Infrequently observed side effects

Extrapyramidal symptoms have been infrequent and have usually occurred at high dose levels. They tend to be mild and easily controlled.

Cardiovascular effects, such as hypotension and tachycardia, have been reported infrequently.

Other infrequently reported side effects include dizziness, nausea, increased sweating, edema, nasal congestion and weight gain.

Sinequan is noneuphoriant, and no dependence has been reported to date.

Safety:

Liver disorders, blood dyscrasias, lens opacities or pigment deposits in eyes or skin have not been reported to date with Sinequan.

Contraindications:

Sinequan is contraindicated in individuals who have shown hypersensitivity to the drug, and in patients with glaucoma or a tendency to urinary retention.

Warnings:

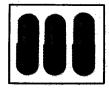
Sinequan should not be used concomitantly or within two weeks of therapy with MAO inhibitors.

Sinequan should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient. Its use in children under 12 years of age is not recommended because safe conditions for its use have not been established.

(See last page for full adverse reactions, contraindications, warnings and precautions.)



Recommended dosage:



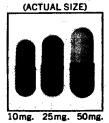
Starting dosage— 25 mg., t.i.d. Maximum dosage-300 mg. per day.

Expected activity:

Antianxiety activity is rapidly apparent, comparable to that of the benzodiazepine tranquilizers. Antidepressant activity is comparable to the tricyclic antidepressants.

How supplied:

Bottles of 100 capsules of 10 mg., 25 mg., and 50 mg.; bottles of 1000 capsules of 25 mg. and 50 mg.



The first single agent that can be prescribed as a tranquilizer, an antidepressant...or both

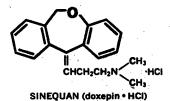
Starting dosage: 25 mg. t.i.d.

SINEQUAN (Doxepin·HCl) Capsules

Description. SINEQUAN (doxepin · HCl) is a new dibenzoxepin psychotherapeutic agent with marked antianxiety and significant antidepressant

activity.

Chemistry. SINEQUAN (doxepin HCl) is a dibenzoxepin derivative and is the first of a new family of psychotherapeutic agents. Specifically, it is an isomeric mixture of N,N-Dimethyl-dibenz(b,e)oxepin- $\Delta^{11(0H)}$, γ propylamine hydrochloride.



Indications. In a carefully designed series of controlled studies, SINEQUAN (doxepin · HCl) has been shown to have marked antianxiety and significant antidepressant activity. SINEQUAN (dexepin · HCl) is recommended

tant anticipressant activity. Sinkicular (decepin rich) is recommended for the treatment of:

1. Patients with psychoneurotic anxiety and/or depressive reactions.

2. Mixed symptoms of anxiety and depression.

3. Alcoholic patients with anxiety and/or depression.

4. Anxiety associated with organic disease.

5. Psychotic depressive disorders including involutional depression and manic depressive reactions.

The target symptoms of psychoneurosis that respond particularly well to SINEQUAN (doxepin-HCl) include anxiety, tension, depression, somatic symptoms and concerns, insomnia, guilt, lack of energy, fear, ap-

In those patients in whom anxiety masks the depressive state, SINEQUAN (doxepin HCl) is of particular value since it exerts a potent antidepressant effect as well as antianxiety activity.

Patients who have failed to respond to other antianxiety or antidepressant drugs may benefit from treatment with SINEQUAN (doxepin HCl). Clinical experience has shown that SINEQUAN (doxepin HCl) is safe

chincal experience has shown that Shriequan (aoxepin net) is said and well tolerated even in the elderly patient.

In a large series of patients systematically observed for withdrawal symptoms, none were reported. This is consistent with the virtual absence of suphoria as a side effect and the lack of addiction potential characteristic of this type of chemical compound.

Contraindications. SINEQUAN (doxepin HCl) is contraindicated in individuals who have shown hypersensitivity to the drug.

SINEQUAN (doxepin HCl) is contraindicated in patients with glaucoma, or a tendency to urinary retention.

MAO inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors

should be discontinued at least two weeks prior to the cautious initiation of therapy with SINEQUAN (doxepin HCl). The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage

Precautiens. Since drowsiness may occur with the use of this drug, patients should be warned of the possibility and cautioned against driving a car or operating dangerous machinery while taking this drug.

Patients should also be cautioned that their response to alcohol may

be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be

closely supervised during the early course of therapy.

Although SINEQUAN (dexepin HCl) has significant tranquilizing activity, the possibility of activation of psychetic symptoms should be kept

Other structurally related psychotherapeutic agents (e.g. iminodibencyls and dibenzocycloheptenes) are capable of blocking the effects of guansthidine and similarly acting compounds in both the animal and man. SINEQUAN (doxepin HCl), however, does not show this effect in animals. At the usual clinical dosage, 75 to 150 mg, per day, SINEQUAN (doxepin HCl) can be given concomitantly with guansthidine and related compounds without blocking the antihypertensive effect. At doses of 300 mg, per day or above, SINEQUAN (doxepin HCl) dose severt a significant blocking effect. In addition, SINEQUAN (doxepin HCl) was similar to the other structurally related psychotherapeutic agents as regards its ability to potentiate norepinephrine response in the animal. However, in the human this effect was not seen. This is in agreement with the low incidence of the side effect of tachycardia seen clinically.

Adverse Esactions. Anticholinergic Effects: dry, meant; plurred vision, and constipation have been reported. They are usually inid, and often subside with continued therapy or reduction of dose.

subside with continued therapy or reduction of dose.

Central Nervous System Effects: drowsiness has been observed. This usually occurs early in the course of treatment, and tends to disappear

as therapy is continued.

Cardiovascular Effects: tachycardia and hypotention have been re-

ported infrequently.

Other infrequently reported side effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects such as increased sweat-

toms, gastrointestinal reactions, secretory enects such as increased sweating, weakness, dizziness, fatigue, weight gain, edoms, parasthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

Desage. For most patients with illiness of mild to moderate severity, a starting dose of 25 mg. 4.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg/day to 150 mg/day.

In more severely ill patients, an initial dose of 50 mg. t.l.d. may be required with subsequent gradual increase to 800 mg./day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg./day.

ose of 300 mg/day.

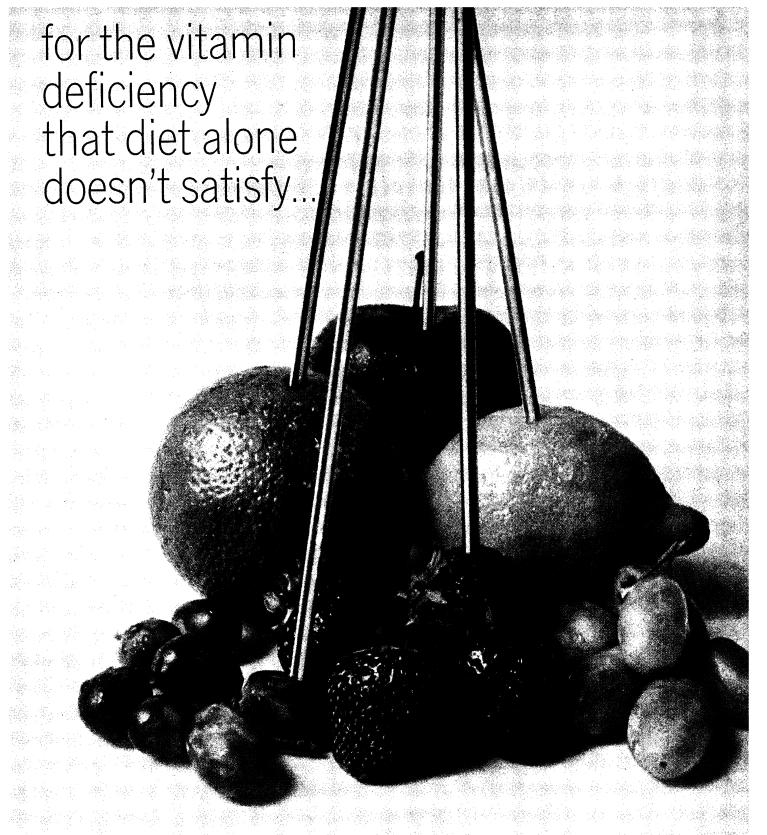
In patients with very mild symptomatology, or amotional symptoms accompanying organic disease, lower does may suffice. Some of these patients have been controlled on does as low as 25-50 mg/day.

Although optimal antidopressant response may not be evident for two to faired weeks, antianxiety activity is

evident for two to inree weeks, anusaxiety activity is rapidly apparent.
Supply. SINEQUAN (doxepin HCl) is available as papeules containing doxepin HCl equivalent to 10 mg., 25 mg., and 50 mg. of doxepin base in bottles of 100; and 25 mg. and 50 mg. in bottles of 1000.

Section September 1969





Thera-Combex H-P® This high-potency vitamin C and B-complex combination starts where diet stops Kapseals®

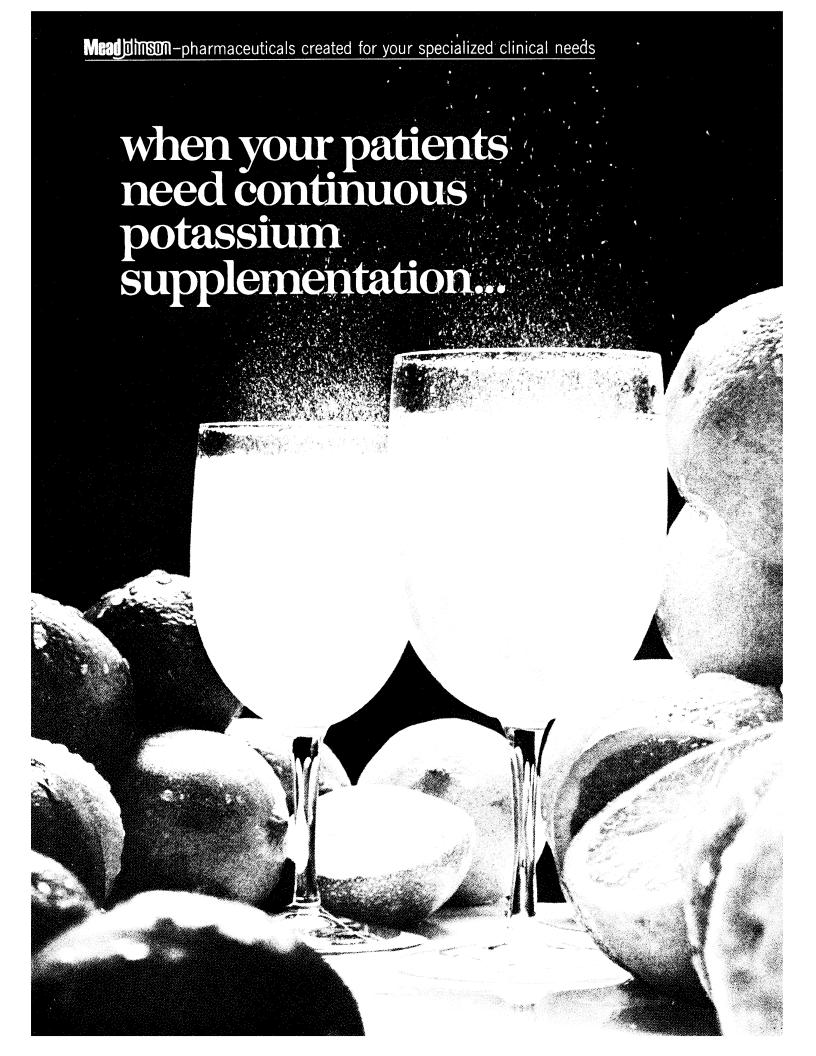
Each Kapseal contains: ascorbic acid, 500 mg.; thiamine mononitrate, 25 mg.; riboflavin, 15 mg.; pyridoxine hydrochloride, 10 mg.; cyanocobalamin, 5 mcg.; nlacinamide, 100 mg.; dl-panthenol, 20 mg.; Taka-Diastase® (Aspergillus oryzae enzymes), 21/2 gr.



The Brown capsule with Green band is a Parke-Davis trademark.

Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS



they need the proved effectiveness and safety of

Each effervescent tablet supplies: 2.5 Gm. potassium bicarbonate (25 mEq. elemental potassium), 2.1 Gm. citric acid, cyclamic acid

Three clinical studies* confirm the effectiveness of good tasting K-Lyte as a source of supplemental potassium to increase low levels of serum potassium and to maintain normal levels. Patients were on continuous diuretic therapy and salt-restricted diets. K-Lyte dosage was one tablet b.i.d.

Serum Potassium Levels (in mEq./L)

Number of patients	Mean initial value	Mean final value
14	3.23	4.83
16	3.50	4.40
25	4.52	4.47

K-Lyte can offer effective potassium supplementation without the gastrointestinal complications sometimes associated with potassium chloride tablets and thiazide-potassium chloride combination therapy. Effervescent K-Lyte is taken in solution, speeding up absorption to avoid these hazards.

Composition: Each tablet contains potassium bicarbonate (2.5 Gm.), citric acid (2.1 Gm.), cyclamic acid, artificial flavor and color.

Contraindications: When renal function is impaired, or if the patient has Addison's disease, potassium supplementation should not ordinarily be instituted.

Precautions: Should not be used in patients with low urinary output unless under the supervision of a physician. In established hypokalemia, attention should be directed toward correction of frequently associated hypochloremic alkalosis and other potential electrolyte disturbances. Patients should be directed to dissolve tablet in stated amount of water to assure against gastrointestinal injury associated with the oral ingestion of concentrated potassium salt preparations.

Side Effects: While nausea has been reported in an occasional patient, K-Lyte produces no serious side effects when given in recommended doses to patients with normal renal function and urinary output. Potassium intoxication causes listlessness, mental confusion, tingling of the extremities and other symptoms associated with a high concentration of potassium in the serum.

Administration and Dosage: K-Lyte effervescent tablets must be dissolved in 3 to 4 ounces of water before taking. Adults: 1 tablet 2 to 4 times daily, depending on the requirements of the patient. Two tablets (50 mEq. of elemental potassium) supply the approximate normal adult daily requirement.

How Supplied: Effervescent tablets—boxes of 30 and 250 (orange or lime).

*Reports on file: Medical Research Department, Mead Johnson Laboratories, Evansville, Indiana 47721 ©1970 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721

71770



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ARCH LABORATORIES 319 South Fourth Street, St. Louis, Missouri 63102

Synthroid®

(sodium levothyroxine)

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) Tablets include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (non-toxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) Injection is indicated in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. When a patient does not respond to oral therapy, SYNTHROID (sodium levothyroxine) injection may be administered intravenously to avoid any question of poor absorption by either the oral or the intramuscular route.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction.

Side effects: The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism: sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

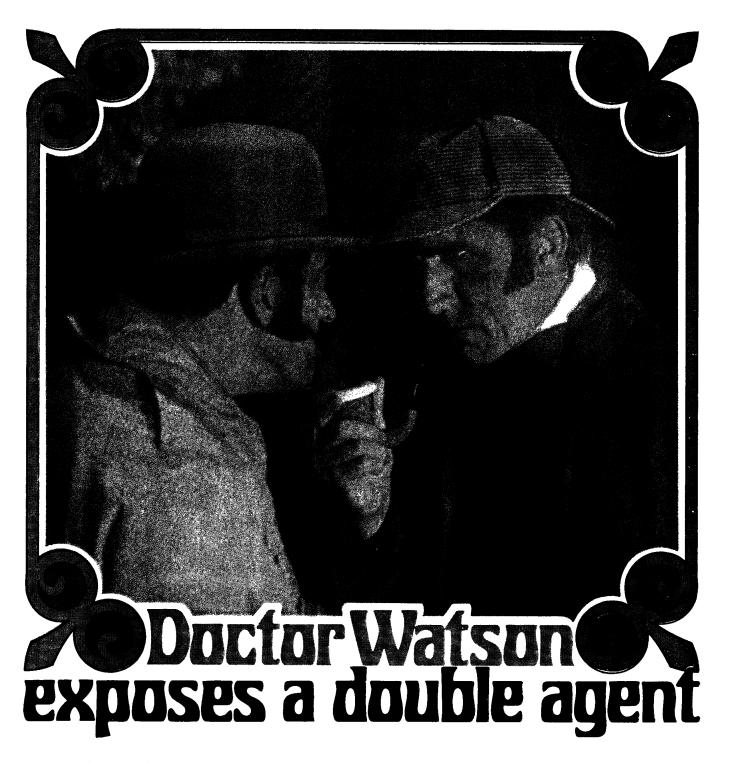
In most cases with side effects, a reduction in dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100 and 500. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent.

SYNTHROID (sodium levothyroxine) INJECTION may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.





Fog on the Embankment. Two figures emerge into silhouette against a haloed street lamp. The flare of a match reveals the profile of Sherlock Holmes. As he lights his calabash, his companion speaks:

"By Jove, Holmes, that amazing intuition of yours has proved right again. What we're looking for is a single entity. I thought we were dealing with several others—even twins. But now—I'd say we've uncovered a double agent."

"Tell me more, Watson, and be quick about it!"

(Watson withdraws a folded paper from inside his greatcoat, and reads aloud from it):

"The key to the whole cypher is SYNTHROID (sodium levothyroxine)"...

"Shhh! Watson, not so loud! You'll alert our quarry."

(Watson continues): "A single entity that serves two functions."

"A master stroke, Watson."

"Follow along, Holmes. In the neighborhood of 95% of the circulating thyroid hormone is levothyroxine— T_4 as you call it. T_4 is bound to thyroxine-binding proteins in the serum. It becomes available only gradually to tissue cells—as free thyroxine."

"Is that why there's such a smooth, predictable response, Watson?"

"Quite! With agent T₄, SYNTHROID, the chances of a precipitous rise in metabolic rate are lessened."

"But how does 'free' thyroxine fit into the picture?"

"Well, Holmes, you might call it the tissue thyroid hormone—because 'free' thyroxine (that is, thyroxine not bound to protein) is active at the tissue level. It is gradually released from thyroxine-binding proteins. Each daily dose of SYNTHROID is mostly bound to thyroid-binding proteins, and slowly released as 'free' thyroxine—the form in which it is metabolically active."

"Magnificent, Watson! So protein-bound thyroxine is the major form of circulating thyroid hormone, and it is released as 'free' thyroxine. And that's why, SYNTHROID is able to simulate the normal process so artfully. Q.E.D."

"Not so fast, Holmes. SYNTHROID works for the *physician*, too. Because its dosage is more precisely controllable, and because response is so smooth and predictable, the *doctor* gets fewer phone calls in the wee hours from agitated patients. Both parties get more sleep!"

"Comforting, my dear doctor, to know that SYNTHROID, the single agent," cleverly does the job of two."



CMA REDWOOD REGIONAL CONFERENCE FOR NORTH COAST COUNTIES

Konocti Harbor Inn, Clear Lake May 15-16, 1970

program:

THE ANEMIC PATIENT

MUSCULO-SKELETAL DISORDERS

presented cooperatively by

North Coast Counties Medical Societies
University of California at San Francisco
California Medical Association

host: Mendocino-Lake Counties Medical Society Austin E. Givens, M.D., Regional Chairman

guest speaker: James H. Jandl, M.D., George Richard Minot Professor of Medicine, Harvard Medical School (made possible by a grant from Merck, Sharp & Dohme Postgraduate Program)

contact: For additional information write:
Continuing Medical Education
California Medical Association
693 Sutter Street, San Francisco 94102

fee: \$20

All California Medical Association members and their families are cordially invited to attend.

CONTINUING MEDICAL EDUCATION ACTIVITIES IN CALIFORNIA AND HAWAII

(FORMERLY WHAT GOES ON)

COMMITTEE ON CONTINUING MEDICAL EDUCATION

THIS BULLETIN of information regarding continuing education programs and meetings of various medical organizations in California and Hawaii is supplied by the Committee on Continuing Medical Education of the California Medical Association. In order that they may be listed here, please send communications relating to your future meetings or postgraduate courses to Committee on Continuing Medical Education, California Medical Association, 693 Sutter Street, San Francisco 94102; or phone: (415) 776-9400, extension 241.

ALCOHOLISM AND DRUG USE

May 16 & 23—The Drug Scene. University of California Extension, Riverside, at 1500 Life Sciences Building, UC Riverside. Two Saturdays. Primarily for physicians. 14 hrs. Contact: Ray Olitt, Health Services Program Coordinator, UC Extension, Riverside 92502. (714) 787-4329.

CANCER

May 15-16 — Hormones and Neoplasms—Cancer Conference. USC at Century Plaza Hotel, Los Angeles. Friday-Saturday. Parathyroid neoplasms, adrenal neoplasms, thyroid neoplasms. 12 hrs.

MEDICINE

April 17—A Symposium Offering a Practical Approach to Office Diagnosis and Management of Respiratory Diseases. Academy of General Practice, San Diego County Medical Society, Smoking Research/San Diego, Riker Laboratories at Town and Country Hotel Convention Center, San Diego. Friday. 6½ hrs. Contact: Worth Larkin, Public Relations Director, TB and Health Assoc. of San Diego and Imperial Counties, 3861 Front St., San Diego 92103. (714) 297-3901.

April 18—Infectious Diseases. UCSF at Childrens Hospital, San Francisco. Saturday. Infections Associated with Intravenous Catheters, with Inhalation RX, and with Urinary Catheters; Overview of Host Defense; Antibiotics—1970; Isolation Procedures. \$35. 5½ hrs.

April 22-25—Advances in Endocrinology and Metabolism. UCSF. Wednesday-Saturday. Intensive review of interrelationships between metabolic disease and endocrine dysfunction, critical evaluation of new developments.

May 4-15—Coronary Care Unit Program for Physicians. CRMP Area V at Los Angeles County-USC Medical Center. Two week course repeated monthly through June, 1970. Arrhythmia detection, diagnosis and therapy, defibrillation and cardioversion, central

venous pressure monitors, placement of pacing catheters, new aspects in diagnosis and treatment of congestive heart failure, shock and associated respiratory problems, and CCU management in community hospitals. Contact: Gladys Ancrum, Dr. P. H., Administrative Associate, CRMP Area V, 1 West Bay State St., Alhambra 91801. (213) 576-1626.

May 4-22—Coronary Care for Physicians Training Program. CRMP Area IV and Cedars-Sinai Medical Center at Cedars of Lebanon Hospital, Los Angeles. Three week course repeated six times through November, designed for practicing internists or cardiologists who will subsequently be working in or directing CCU in community hospitals. Electrocardiography, physical diagnosis, CCU planning and administration, electrolytes and acid-base metabolism, emphasis on practical techniques. Contact: Herbert Stein, M.D., Coronary Care for Physicians Training Programs, Dept. of Cardiology, Cedars of Lebanon Hospital, Box 54265, Los Angeles 90029. (213) 662-9111, ext. 306.

KEY TO ABBREVIATIONS AND SYMBOLS

Medical Centers and CMA Contacts for Information

CMA: California Medical Association

Contact: Continuing Medical Education, California Medical Association, 693 Sutter Street, San Francisco 94102. (415) 776-9400, ext. 241.

LLU: Loma Linda University

Contact: John E. Peterson, M.D., Associate Dean for Research Affairs, Loma Linda University School of Medicine, Loma Linda 92354. (714) 796-7311.

PMC: Pacific Medical Center

Contact: Arthur Selzer, M.D., Chairman, Education Committee, Pacific Medical Center, Clay and Webster Streets, San Francisco 94115. (415) 931-8000.

STAN: Stanford University

Contact: Thomas A. Gonda, M.D., Associate Dean, Stanford University School of Medicine, 800 Pasteur Drive, Stanford 94305. (415) 321-1200, ext. 5371.

UCD: University of California, Davis

Contact: George H. Lowrey, M.D., Professor and Chairman, Department of Postgraduate Medicine, University of California, Davis, School of Medicine, Davis 95616. (916) 752-0331.

UCI: University of California — California College of Medicine, Irvine

Medicine, Irvine
Contact: Robert Combs, M.D., Associate Dean,
University of California, Irvine—California College of Medicine, Irvine 92664. (714) 833-5991.

UCLA: University of California, Los Angeles

Contact: Donald Brayton, M.D., Associate Dean and Head, Continuing Education in Medicine and the Health Sciences, 15-39 Rehabilitation Center, UCLA Center for the Health Sciences, Los Angeles 90024. (213) 825-6514.

UCSD: University of California, San Diego

Contact: Michael Shimkin, M.D., Associate Dean for Health Manpower, 1309 Basic Sciences Building, University of California, San Diego, School of Medicine, La Jolla 92038. (714) 453-2000, ext. 2704.

UCSF: University of California, San Francisco

Contact: Seymour M. Farber, M.D., Dean, Educational Services and Director, Continuing Education, Health Sciences, University of California Medical Center, San Francisco 94122. (415) 666-1692.

USC: University of Southern California

Contact: Phil R. Manning, M.D., Associate Dean, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 90088. (218) 225-1511, ext. 208.

- May 9—Symposium on Clinical Pharmacology and Drug Therapy. Division of Clinical Pharmacology, Department of Medicine, STAN, and Palo Alto Medical Clinic at STAN. Saturday. \$15, no fee for medical students and house staff. Contact: Stanley N. Cohen, M.D., Room S-161, STAN. (415) 321-1200, ext. 6021.
- May 9—Diseases of the Gastrointestinal Tract. See Radiology—Pathology, May 9.
- May 12—Analytical Approach to Cardiac Diagnosis. American College of Cardiology and LLU at LLU. Tuesday. Representative cases of heart disease: history, examination, laboratory and radiological procedures. 7 hrs. Contact: William D. Nelligan, Exec. Dir., ACC, 9650 Rockville Pike, Bethesda, Md. 20014. (301) 530-1600.
- May 13-14—Coronary Care. USC at Hilton Hotel, Los Angeles. Wednesday-Thursday. 12 hrs.
- May 15—California Heart Association—Annual Meeting Scientific Sessions. Hotel del Coronado, Coronado. Friday. Coronary thrombosis and myocardial infarction, problems in ECG diagnosis of myocardial infarction, premature coronary disease, coronary arteriography. \$10. 7 hrs. Contact: Rodman D. Starke, M.D., 1370 Mission St., San Francisco 94103. (415) 626-0123.
- May 15 & 16—Physical Signs in Cardiovascular Disease. STAN, Santa Clara and San Mateo Heart Associations, and CRMP Area III at Palo Alto Veterans Administration Hospital, Palo Alto. Friday & Saturday. One day course repeated two successive days. Review of important physical signs of cardiovascular disease. A.M., examination of cardiac patients; P.M., systematic review of physiological basis and implications of salient physical signs. Contact: Herbert Hultgren, M.D., Medical Service (III), Palo Alto V.A. Hospital, 3801 Miranda Ave., Palo Alto 94306. (415) 326-5600.
- May 15-17—Basic Principles of Cardiac Therapy. PMC and the American College of Cardiology at Jack Tar Hotel, San Francisco. Friday-Sunday. Clarification of pathophysiological basis of various disease states, rational approach to drug usage. \$80 members, \$120 non-members. 24 hrs. Contact: PMC.
- May 16-Progress and Problems in Neurology for the '70s. Palo Alto Medical Clinic and Research Foundation, Palo Alto. Saturday. Treatable Forms of Dementia; Mechanisms of Developmental Defects of the Nervous System; New Concepts of "Degenerative" Neurological Diseases—The Role of Slow Viruses; The Medical and Neurological Implications of Space Travel; Recent Advances in Adult Neurology-Parkinsonism and DOPA; "Pot" and "Acid" - The Medical and Neurological Implications of the Drug Problem; The Current Status of Strokes and Anticoagulation; Senile Neuronal Drop-Out - The Problems of Growing Old Gracefully. \$15. 51/2 hrs. Contact: Bernard I. Lewis, M.D., Palo Alto Medical Clinic and Research Foundation, 300 Homer Ave., Palo Alto 94301. (415) 321-4121.
- May 16-17—Current Concepts on the Management of the Stroke Patient. Granada Hills Community Hospital and San Fernando Valley State College Health Sciences Department at Main Auditorium, Speech Building, San Fernando Valley State College, Los Angeles. Saturday-Sunday. Management and Rehabilita-

- tion; Role of Anticoagulants; Psychological and Psychiatric Problems; Cerebral-Vascular Accidents in the Young; Headache; Subclavian Steel Syndrome; Extra-and Intra-Cranial Hemodynamic Flow Studies; Echo-Encephalography; Electro-Encephalography; Brain Scanning; Role of Extra-Cranial Vascular Surgery; Angiography. \$10. 16 hrs. Contact: Arno A. Roscher, M.D., Program Chairman, Granada Hills Community Hospital, 10445 Balboa Blvd., Granada Hills 91344. (213) 360-1021.
- May 22-23—Instrumental Acquisition of Cardiological Data with Clinical Correlation. American College of Cardiology, Memorial Hospital of Long Beach, and Long Beach Heart Association at Memorial Hospital of Long Beach. Friday-Saturday. Precordial scintillation scanning; special catheters for ventricular function studies; thermodilution flowmeters; external measurements for ventricular function; new methods of cardiac pacing; use of vectorcardiography for infarct sizing. \$55. 14 hrs. Contact: William D. Nelligan, Exec. Dir., ACC, 9650 Rockville Pike, Bethesda, Md. 20014. (301) 530-1600.
- May 23—Infectious Problems in Renal Disease. USC. Saturday. 6 hrs.
- May 25-28—International Conference on Vascular Diseases of the Brain and Spinal Cord. American Academy of Neurology, USC and Rancho Los Amigos Hospital at Anaheim Convention Center, Anaheim. Monday-Thursday. U.S. and international papers, rehabilitation team personnel invited. Limited traineeships available. \$125. 18 hrs. Contact: Richard P. Boggs, M.D., Chief, Division of Neurological Sciences, Rancho Los Amigos Hospital, 7601 E. Imperial Highway, Downey 90242. (213) 869-0921.
- June 1-12—Coronary Care Unit Program for Physicians. CRMP Area V. See Medicine, May 4-15.
- June 5-6—Vectorcardiography. UCSF. Friday-Saturday.
- June 15-July 3—Coronary Care for Physicians Training Program. CRMP Area IV. See Medicine, May 4-22.
- June 17-18—Exercise in Coronary Disease. USC at Rancho Los Amigos Hospital, Downey. Wednesday-Thursday. 12 hrs.
- June 23-26—Endocrine Society—Annual Meeting. Hilton Hotel, San Francisco. Tuesday-Friday. Contact: Nona Lee Mattox, Exec. Sec., ES, 1211 N. Shartel, Oklahoma City 73103. (405) 232-8747.
- Continuously—Basic Home Course in Electrocardiography. One year postgraduate series, ECG interpretation by mail. Physicians may register at any time. \$100 (52 issues). Contact: USC.
- Continuously—Training in the Procedure of Tonometry. Northern California Society for the Prevention of Blindness at the Glaucoma Screening Clinic, San Francisco. Weekly Saturday morning program in tonometry for internists and general practitioners. Advance appointment required, no charge. 3 hrs. Contact: Frederic S. Weisenheimer, Ed.D., Exec. Dir., NCSPB, 4200 California Street, San Francisco 94118. (415) 387-0934.
- Continuously Medico-Surgical Cardiovascular Seminar. Palo Alto Veterans Administration Hospital, Palo Alto. First Thursday of each month, lectures, demonstrations, seminar discussions, and rounds. Designed

specifically for a selected group of physicians from the Fresno area. Other physicians invited to participate. Contact: William Angell, M.D., Division of Cardiovascular Surgery, Dept. of Surgery, Palo Alto V.A. Hospital, 3801 Miranda Avenue, Palo Alto 94306. (415) 326-5600.

Continuously—Coronary Care Unit Training for Physicians. CRMP Area VI and San Bernardino County General Hospital at San Bernardino County General Hospital. Four week courses at monthly intervals, scheduled by arrangement. For practicing physicians working in and directing CCU's. Bedside care, electrocardiography, physical diagnosis, clinical history, therapy, insertion of pacemakers, cardioversion. 160 hrs. Contact: Carl L. Cook, Jr., M.D., San Bernardino County General Hospital, 780 E. Gilbert St., San Bernardino 92404. (714) 885-3411.

Continuously—Training for Physicians in Nephrology. CRMP Area VI and LLU at LLU. Courses of four weeks or more available, to be scheduled by arrangement. Bedside conferences, clinical care and management. Hemodialysis, peritoneal dialysis, renal biopsy and kidney transplantation. 160 hrs. Contact: Stewart W. Shankel, M.D., LLU.

Continuously—Training for Physicians in General Internal Medicine. CRMP Area VI and LLU at LLU. Four weeks or more, scheduled by arrangement. Bedside and classroom training, practical aspects of clinical care and management. 160 hrs. Contact: LLU.

Continuously—Training of Physicians in Modern Concepts of Pulmonary Care. CRMP Area VI, LLU and Riverside General Hospital. Four weeks or more, scheduled by arrangement. Diagnostic and therapeutic methods in medical chest disease, physiological methodolgy of modern pulmonary care programs, use of new instrumentation in the field. 160 hrs. Contact: George G. Burton, M.D., LLU.

Grand Rounds—Medicine

Tuesdays

8:30-10:00 a.m., Assembly Hall, Harbor General Hospital, Torrance. UCLA.

Wednesdays

10:30-12:00 noon. Auditorium, Medical Sciences Building. UCSF.

11:00 a.m., Room 1645, Los Angeles County-USC Medical Center. USC.

12:30 p.m., Auditorium, School of Nursing, Orange County Medical Center. UCI.

12:30-1:30 p.m., University Hospital, UCSD.

Thursdays

10:30-12:00 noon, Room 33-105, UCLA Medical Center. UCLA.

Fridays

8:00 a.m., Courtroom, Third Floor, Kern County General Hospital, Bakersfield. CRMP Area IV.

8:30 a.m., Auditorium, Lebanon Hall, Cedars of Lebanon Hospital, Los Angeles. CRMP Area IV.

Neurology. 10:15 a.m., held alternately at Stanford University Hospital and Neurology Conference Building 7, V.A. Hospital, Palo Alto. STAN. 1st and 3rd Fridays, 11:00 a.m., Auditorium, Brown

Building, Mount Sinai Hospital, Los Angeles. CRMP Area IV.

1:15 p.m., Lieb Amphitheater, Timken-Sturgis Research Bldg., La Jolla. Scripps Clinic and Research Foundation.

Rheumatology Grand Rounds. 11:45 a.m., Room 6441, Los Angeles County-USC Medical Center, Los Angeles. USC.

MENTAL RETARDATION

May 22-23—The Mentally Retarded Adult in the Community. UCSF. Friday-Saturday. \$20. 9 hrs.

June 8-19—Mental Retardation Workshop. UCLA and Pacific State Hospital, Pomona, at UCLA Neuropsychiatric Institute. Two weeks. For physicians and allied professionals. Causation, symptomatology, care, treatment and management, diagnostic techniques suitable for office practice, parental reactions and intra-family psycopathology, recent research findings. 80 hrs. Contact: UCLA.

OBSTETRICS AND GYNECOLOGY

May 2-3—Female Urology. Tri-County Obstetrical and Gynecological Society at Santa Barbara Biltmore Hotel, Santa Barbara. Saturday-Sunday. 10 hrs. Contact: Jack R. Robertson, M.D., 1430 E. Main St., Suite 202, Santa Maria 93454. (805) 925-8759.

May 15-16—Obstetrics and Gynecology Symposium. Southern California Permanente Medical Group and Kaiser Foundation Hospitals at Beverly Hilton Hotel, Beverly Hills. Friday-Saturday. Contact: Shirley Gach, Rm. 6014, So. Calif. Permanente Med. Group, 4900 Sunset Blvd., Los Angeles 90027. (213) 663-8411.

Grand Rounds—Obstetrics and Gynecology

Mondays

10-11:30 a.m., Assembly Room, First Floor, Harbor General Hospital, Torrance. UCLA.

Fridays

8 a.m., Auditorium, Orange County Medical Center.

PEDIATRICS

April 18—Infectious Diseases. UCSF at Childrens Hospital, San Francisco. See Medicine, April 18.

April 22-25—The Hospitalized Child, His Family and His Community. American Association for Child Care in the Hospital, Stanford Childrens Convalescent Hospital, UCSF and STAN at Sheraton-Palace Hotel, San Francisco. Wednesday-Saturday. 15 hrs. Contact: Helen H. Glaser, M.D., Stanford Childrens Convalescent Hospital, 520 Willow Road, Palo Alto 94304. (415) 327-4800.

May 7-9—Acute Care in Pediatrics. UCSF. Thursday-Saturday. Grand Rounds—Management of the Severely Burned Patient; The Dying Child; Cardiopulmonary Emergencies in the Newborn; Hematology and Neurology Emergencies; Endocrine and Renal Emergencies; Infections as an Emergency. \$75. 14 hrs.

May 16-17—American Academy of Pediatrics—Northern California Chapter. Four Seasons, Tahoe City. Saturday-Sunday. Light Therapy for Hyperbilirubinenemia and Intensive Care in the Nursery; Serious Infections in the Newborn; Genetic Disorders of Metabolism; Cardial Transplantation; Environmental and Population Problems. \$20. 8 hrs. Contact: Birt Harvey, M.D., 1101 Welch Road, Palo Alto 94304. (415) 325-4482.

- May 18-19—Hearing Problems in Children—Recent Advances. UCLA. Monday-Tuesday.
- May 21-22—Ear Diseases in Children—Controversial Aspects. UCLA. Thursday-Friday.
- June 5—Annual Premature Day. STAN. Friday. \$15.
- June 19-21-Southern California Postgraduate Meeting. Childrens Hospital of Orange County. Friday-Sunday. Neonatology; Genetics and Inborn Errors of Metabolism; Growth and Endocrinology; Gastroenterology and Shock, \$35. 17 hrs. Contact: Merl J. Carson, M.D., Childrens Hospital of Orange County, 1109 W. La Veta, Orange 92668. (714) 538-8831.
- June 24-26—Annual Pediatric Seminar—The First Ten Months of Life. Childrens Health Center, San Diego. Wednesday-Friday. \$25. 15 hrs. Contact: David L. Chadwick, M.D., Medical Director, 8001 Frost Street, San Diego 92123. (201) 277-5808.

Grand Rounds—Pediatrics

Tuesdays

8:00 a.m., Childrens Hospital Medical Center, Oakland.

8:30 a.m., Auditorium, Childrens Division Building, Los Angeles County-USC Medical Center, Los Angeles. USC.

8:30 a.m., Room 4-A, Kern County General Hospital, Bakersfield. CRMP Area IV.

8:30 a.m., Pathology Auditorium, San Francisco General Hospital.

Wednesdays

8-9:00 a.m., held alternately at Auditorium, Orange County Medical Center and Auditorium, Childrens Hospital of Orange County. UCI.

8:30 a.m., Bothin Auditorium, Childrens Hospital, San Francisco.

Thursdays

8:30-10:00 a.m., Room 664, Science Building, UCSF.

8:30-9:30 a.m., Lebanon Hall, Cedars of Lebanon Hospital, Los Angeles.

8:30 a.m., First Floor Auditorium, Harbor General Hospital, Torrance.

Fridays

8:00 a.m., Lecture Room, A Floor, Health Sciences Center, UCLA. CRMP Area IV.

8:30 a.m., Stanford University Medical Center, Palo

8-9:00 a.m., Lecture Hall, Childrens Hospital of Los Angeles.

Infectious Disease Grand Rounds. 10:00 a.m., Auditorium, Childrens Division Building, Los Angeles County-USC Medical Center, Los Angeles. USC.

PSYCHIATRY

- April 18 & 25-Critical Issues in Mental Health. University of California Extension, Riverside, at Cafeteria, University Commons, UC Riverside. Two Saturdays. 14 hrs. Contact: Ray Olitt, Health Services Coordinator, UC Extension, Riverside 92502. (714) 787-4329.
- May 2—Use of Imagination in Psychotherapy. UCSF. Saturday. Dreams and Fantasies in Psychoanalytically Oriented Psychotherapy, Images in Jungian Therapy, Image Formation Techniques in Gestalt Therapy, Systematic Desensitization— A Form of Behavior Therapy, Implosive Therapy, Uses of Image Formation in Other Schools of Therapy. \$15. 5½ hrs.
- May 2-3—Explorations and Process in Group Therapy. UCSF at Modesto Junior College, Modesto. Saturday-Sunday.
- May 7-11 American Psychoanalytic Association. Sheraton Palace Hotel, San Francisco. Thursday-Monday. \$15 for non-members. 21 hrs. Contact: Mrs. Helen Fischer, Exec. Sec., APA, 1 East 57th Street, New York 10022. (212) 265-0430.
- May 8-10—American Academy of Psychoanalysis-Annual Meeting. Jack Tar Hotel, San Francisco. Friday-Sunday. Psychoanalysis and the Newer Therapies. \$5 non-members. 15 hrs. Contact: Mollie Carroll, 125 East 65th Street, New York 10021. (212) 879-8950.
- May 8-10—Society for Biological Psychiatry. Hilton Hotel, San Francisco. Friday-Sunday. Personality Disorders. 24 hrs. Contact: George N. Thompson, M.D., Sec.-Treas., SBP, 2010 Wilshire Blvd., Los Angeles 90017. (213) 483-7863.
- May 9—American College of Psychiatrists Annual Meeting. Fairmont Hotel, San Francisco. Saturday. Contact: Melvin Sabshin, M.D., University of Illinois, Medical Center, P.O. Box 6998, Chicago 60680. (312) 663-7000.
- May 9-10—Psychiatry and the Law. UCSF at Benbow Inn, Garberville. Saturday-Sunday. Legal Aspects of Mental Illness in California; Suicide, Faith and Society; Deviant Behavior; The Draft Law and the College Counselor; The Lanternman-Petris-Short Act; The Concept of Diminished Capacity in Forensic Psychiatry; Guilt; Psychiatrist as Expert Witness; Drugs, Youth and Legal Restraits. \$25. 81/2 hrs.
- May 10—Association for the Advancement of Psychotherapy. Civic Auditorium, San Francisco. Sunday. The Role of Psychotherapy in the Treatment of Depressed Suicidal Patients. \$5. Contact: Stanley Lesse, M.D., Pres., AAP, 15 W. 81st Street, New York 10024. (212) 873-9233.
- May 10-American Society for Adolescent Psychiatry -Annual Clinical Conference. Hilton Hotel, San Francisco. Sunday. Identity—Clinical Aspects; The Spectrum of Adolescent Therapies; "High School"; Etiology of Three Current Adolescent Syndromes - An Hypothesis. 5 hrs. Contact: Herman D. Staples, M.D., Sec., ASAP, 24 Green Valley Rd., Wallingford, Pa. 19086. (215) 556-1054.

- May 11-15—American Psychiatric Association. Civic Auditorium and Brooks Hall, San Francisco. Monday-Friday. Contact: Robert S. Garber, M.D., Exec. Sec., Carrier Clinic, Belle Mead, New Jersey 08502. (201) 359-3101.
- May 14-16—Mental Health 2½ Day Symposium. UCSF. Thursday-Saturday.
- May 16-17—Progress in Psychotherapy. UCSF at Napa State Hospital, Imola. Saturday-Sunday.
- May 23-24—Residential Care for the Mentally III Patient. UCSF at DeWitt Hospital, Auburn. Saturday-Sunday.
- June 26-28—Comparative Psychotherapies. USC Division of Postgraduate Psychiatry at Sahara Tahoe Hotel, Lake Tahoe. Friday-Sunday. \$50. Contact: Donald F. Naftulin, M.D., Director, Division of Postgraduate Psychiatry, USC. (213) 225-1511, ext. 336.

RADIOLOGY—PATHOLOGY

- April 17-30—Radiology of the Gastrointestinal Tract. USC, Princess Carla Cruise to Mexico from Los Angeles. Two weeks. \$200. 28 hrs.
- May 9—Diseases of the Gastrointestinal Tract. South Bay Radiology Society and South Bay Pathology Society at Carmel Theater, Carmel. Saturday 1:30-5:30. Separate morning workshop in tube biopsy processing technique and interpretation. 4 hrs. Contact: Robert Rinehart, M.D., Dept. of Pathology, Santa Clara Valley Medical Center, 751 South Bascom Ave., San Jose 95128. (408) 293-0262, ext. 491.
- May 16—Radiology Society of Southern California. Hotel del Coronado, Coronado. Saturday. Contact: Gladden V. Elliott, M. D., 5565 Grossmont Center Drive, Suite 1, La Mesa 92041.
- Continuously—Principles and Clinical Uses of Radioisotopes. UCSF. Fundamentals for the proper understanding and use of radioactivity in clinical medicine. Training in diagnostic and therapeutic uses of radioisotopes. Normal period of training: 3 months. Two part course: Part A, Basic Fundamentals; Part B, Clinical Applications.
- Continuously Mammography. UCSF Mammography Section, Department of Radiology. Three days weekly, beginning with Tuesday. Call several days in advance. Contact: Richard H. Gold, M.D., Mammography Section, Department of Radiology, UCSF. (415) 666-1918.

Grand Rounds-Radiology

Friday

Neuroradiology Grand Rounds. 9:30 a.m., held alternately at Stanford University Hospital and Neurology Conference Building 7, V.A. Hospital, Palo Alto, STAN.

SURGERY—ANESTHESIOLOGY

May 2—Recent Developments in Anesthesiology. Palo Alto Medical Clinic and Research Foundation, Palo Alto. Saturday. Ketamine, Saunders Ventilator, Arrhythmias, Preparation of Respiratory Patient for

- Surgery. \$10. 6 hrs. Contact: John Damron, M.D., Palo Alto Medical Clinic, 300 Homer Ave., Palo Alto 94301. (415) 321-4121.
- June 4-6—Highlights of Ophthalmology. PMC Department of Ophthalmology at PMC. Thursday-Saturday. Cryosurgery, Fluorescein angiography, glaucoma, cataract surgery, diabetic retinopathy, retinal detachment, adhesives in surgery, contact lenses and ultrasonography. \$125. Contact: Wayne L. Erdbrink, M.D., Director of Residency Training, Dept. of Ophthalmology, PMC.
- June 4-6—Rheumatoid Arthritic Surgery. UCSF and American Academy of Orthopaedic Surgeons at UCSF. Thursday-Saturday. \$150. 17½ hrs. Contact: UCSF.
- June 12-13—Le Roy C. Abbott Orthopedic Society— Annual Meeting. University of California Hospital, San Francisco. Friday-Saturday. 8 hrs. Contact: William S. Cappeller, M.D., Sec.-Treas., LCAOS, 450 Sutter Street, San Francisco 94108. (415) 397-4455.
- June 12-14—California Society of Anesthesiologists—4th Biennial Scientific Meeting. Sahara-Tahoe Hotel, South Shore, Lake Tahoe. Friday-Sunday. The Anesthesiologist and His Relationship to Other Specialties. 8 hrs. Contact: Norman R. Catron, Exec. Sec., CSA, 100 So. Ellsworth Ave., Suite 401, San Mateo 94401. (415) 343-4644.

Grand Rounds—Surgery

Wednesdays

7:15 a.m., Auditorium, Kern County General Hospital, Bakersfield. CRMP Area IV.

1st and 3rd Wednesdays. 11:00 a.m., Auditorium, Brown Building, Mount Sinai Hospital, Los Angeles. CRMP Area IV.

Thursdays

Neurology and Neurosurgery Grand Rounds. 11:00-12:15. Room 663, Science Building, UCSF.

Fridays

1-2:00 p.m., Auditorium, Orange County Medical Center, Orange. UCI.

Neurosurgery. 11:15 a.m., held alternately at Stanford University Hospital and Neurology Conference Building 7, V.A. Hospital, Palo Alto, STAN.

Saturdays

8:00 a.m., Auditorium, 1st floor, University Hospital of San Diego County, San Diego. UCSD.

9:00 a.m., Room 73-105, Health Sciences Center, UCLA. CRMP Area IV.

8:30 a.m., Assembly Room, Harbor General Hospital, Torrance. CRMP Area IV.

OF INTEREST TO ALL PHYSICIANS

- April 17-18—Infectious Diseases. UCSF. See Medicine, April 17-18.
- April 19—Office Emergencies: A Symposium for Medical Assistants. UCSF. Sunday. \$12.50. 6 hrs.
- April 23-25—First Annual Hospital Medical Staff Conference—Medical Staff Leadership: Fact or Fic-

- tion. USC and CRMP Area V at Monte Corona Conference Center, Twin Peaks. Thursday-Saturday. \$100. 18 hrs.
- April 25-26-Sex in Modern Society. UCSF at Flamingo Hotel, Santa Rosa. Saturday-Sunday. \$15. 8 hrs.
- May 1-2—Trauma—Immediate Care. UCSF at Mary's Help Hospital, Daly City. Friday-Saturday. Initial Evaluation of Injured Patient; Cranio-Cerebral Injuries and the Unconscious Patient; Thoracic Injuries; Abdominal Trauma; Hemmorhagic Shock and Intravascular Coagulation; Vascular Injuries; Radiology; Acute Orthopedic Problems; Treatment of the Broken Hip and Wrist; The Knee; Orthopedic and Neurological Aspects of Broken Neck and Back; Fractures in Children. \$40.
- May 3-9—Hawaii Medical Association. Hawaiian Village, Honolulu. Sunday-Saturday. Contact: Miss Lee McCaslin, Exec. Sec., HMA, 510 Beretania Street, Honolulu 96813. (808) 536-7702.
- May 6—Annual Seminar—N.E. Sub-Chapter, Los Angeles County Academy of General Practice. Santa Teresita Hospital, Duarte. Wednesday. Alcoholism and Dangerous Drugs. \$15. 3 hrs. Contact: John A. Corbin, M.D., 924 Buena Vista Avenue, Duarte 91010. (213) 358-455.
- May 8-9—Population Explosion, Birth Control, Sexual Revolution. University of California Extension, Riverside, at Watkins Hall, UC Riverside. Friday-Saturday. 10 hrs. Contact: Ray Olitt, Health Services Program Coordinator, UC Extension, Riverside 92502. (714) 787-4329.
- May 16-17—Economic Organization of the Physician. UCSF at Hilton Hotel, San Francisco. Saturday-Sunday. \$75. 121/2 hrs.
- May 20-Medical Practices in Central America and Mexico. Agnews State Hospital at Agnews State Hospital, San Jose. Wednesday. 11/2 hrs. Contact: J. Elizabeth Jeffress, M.D., Agnews State Hospital, San Jose 95114. (408) 262-2100.
- May 22-23—Teenage Pregnancies. USC at International Hotel, Los Angeles. Friday-Saturday. Medicine, Education, Law, Social Services. 12 hrs.
- May 22-24—California Medical Assistants Association -Annual Convention. International and Hilton Hotels, Los Angeles. Friday-Sunday. Contact: Kay Marsh, 7271 Katella Avenue #19, Stanton 90680. (714) 828-3525.
- May 29-July 1-Medical Centers of Europe. USC. Five weeks. Visiting medical centers in Dublin, London, Amsterdam, Moscow, Vienna, Rome, Venice-Lido,
- June 17-Income Maintenance Predicated on Reproductive Responsibility: A New Approach To The Prevention of Mental Illness Due to Ignorance, Poverty, and Overcrowding. Agnews State Hospital, San Jose. Wednesday. 11/2 hrs. Contact: J. Elizabeth Jeffress, M.D., Agnews State Hospital, San Jose 95114. (408) 262-2100.
- June 18-July 9-Medical Centers of Africa 1970. USC in Africa. Three weeks. Visiting Senegal, Ivory Coast, Ghana, Uganda, Kenya, Tanzania. \$1699.

- June 21-25 American Medical Association. Palmer House, Chicago. Sunday-Thursday. Contact: Ernest B. Howard, M.D., Exec. Vice-Pres., AMA, 535 N. Dearborn St., Chicago 60610. (312) 527-1500.
- Continuously-Audio-Digest Foundation. A non-profit subsidiary of CMA. Twice-a-month tape recorded summaries of leading national meetings and surveys of current literature. Services by subscription in: General Practice, Surgery, Internal Medicine, Ob/Gyn, Pediatrics, Anesthesiology, Ophthalmology. Catalog of lectures and panel discussions in all areas of medical practice also available. Contact: Mr. Claron L. Oakley, Editor, 619 S. Westlake Ave., Los Angeles 90057.

TELEVISION

- Southern California's Medical Television Network. UCLA. Weekly broadcasts, Tuesdays 8:30 a.m. Contact: UCLA Medical Television. (213) 825-2071.
- April 21—Malnutrition. Medical Television Network.
- April 28-Management of Schizophrenia in the Community. Medical Television Network.
- May 5-Initial Workup of Hypertension. Medical Television Network.
- May 12-Preventive Medicine. University of Western
- May 19—Psoriasis. British Broadcasting Corporation.
- May 26—Breakthroughs in Malignant Diseases. Medical Television Network.
- Santa Clara County Medical Society's MD-TV. Weekly broadcasts. Thursdays 8:30 p.m. Channel 54, Greater San Jose Area. Of educational value to both physicians and nurses. Contact: Roger Brown, Santa Clara County Medical Society, 700 Empey Way, San Jose 95128 (408) 286-5050.

CMA Postgraduate Institutes and Circuit Courses

- May 8-9—San Joaquin Valley Counties Regional Postgraduate Institute. CMA, USC, and Fresno County Medical Society at Ahwahnee Hotel, Yosemite. Friday-Saturday. Concurrent symposia in Adolescent Medicine, Sensitivity Training, Hematology, Coronary Care, The Medical School and the Practicing Community. \$20. 10 hrs. Contact: CMA
- May 15-16 Redwood Regional Conference. CMA, UCSF at Konocti Harbor Inn, Clear Lake. Friday-Saturday. The Anemic Patient and Musculo/Skeletal Disorders. \$20. Contact: CMA.
- June 18-20—Sacramento Valley Counties Regional Postgraduate Institute. CMA, UCLA and Sacramento County Medical Society at Cal Neva Lodge, North Lake Tahoe. Thursday-Saturday. Cerebral Vascular Disease including Rehabilitation and the Surgical and Medical Management of Cardiac Disease, Delivery of Health Care in the '70s. \$20. 12 hrs. Contact: CMA.

Heart Disease

What Do We Know About Diet As a Risk Factor?

LAURENCE M. HURSH, M.D.

WHAT IS CORONARY HEART DISEASE? How does it affect the heart? The heart is a muscular organ which pumps blood throughout the body. Every part of the body needs blood to supply oxygen and nutrients, and to carry away waste products. The action of the heart is vital to life.

Like all other organs, the heart itself needs a blood supply to function. Blood to nourish the heart muscle is carried by the right and left coronary arteries. These are small blood vessels about the size of a drinking straw.

Coronary heart disease is a term used to describe conditions of the coronary arteries that may cause damage to the heart. During life, the coronary arteries may gradually become narrowed with atherosclerosis. This is a buildup of patches of fatty material and other substances in the smooth inner wall of the artery. In addition, the artery becomes less elastic.

If blood flow through the diseased coronary artery is reduced, a person may suffer from angina. This is a sudden vise-like pain in the chest, and it may be caused by unusual physical effort or strain. If the blood supply to the heart is severely reduced, or cut off completely, a heart attack usually occurs.

Complete blockage of the artery may be caused by atherosclerosis itself, or by coronary thrombosis. Thrombosis is the formation of a blood clot in the narrowed passageway. All, or part of the heart is then without enough blood, and the heart muscle is damaged from lack of oxygen. Sometimes the heart is put out of action altogether. Some 40 percent of "coronary" victims die from their first heart attack.

What causes coronary heart disease? Unlike infectious diseases such as measles, coronary heart disease cannot be pinned down to a single cause — it is not a simple process.

Atherosclerosis does not always produce heart damage. Coronary thrombosis is one severe and often fatal complication of atherosclerosis. There may be other conditions that trigger a heart attack. We don't know if coronary thrombosis is caused by atherosclerosis or whether the two processes are entirely separate.

Coronary disease is much more common in wealthy industrialized countries than in poorer countries. Immigrants to the United States from Ireland, southern Italy and rural districts of Norway generally develop more coronary disease than their counterparts back home. Exposure to the American way of life seems to give them "American" hearts, and makes them more prone to heart disease.

How is our way of life related to heart disease? Since the turn of the century, there has been great increase in coronary heart disease. This increase is probably related to parallel changes in our pattern of living during this time.

Life has become more urban and highly mechanized; we ride elevators, buses and automobiles instead of walking; we experience more stress, smoke more cigarettes and engage in less physical activity; the kinds of food we eat have changed.

Laurence M. Hursh, M.D., is Professor of Health Science, University of Illinois at Urbana, and Director of Health Services at this university. He is also Staff Physician at McKinley Hospital, Urbana.

pital, Urbana.

Dr. Hursh has had wide experience in medicine and nutrition. In a 20-year career with the U.S. Army, he had held the positions of Commanding Officer, U.S. Army Medical Research and Nutrition Laboratory, Fitzsimons Army Hospital, Denver, Colo., and Chief, Medical Research Branch, U.S. Army Medical Research and Development Command, Washington, D.C. He is a member of the American Medical Association and a Fellow of the American College of Physicians. He also holds membership in the American Institute of Nutrition and the American Society for Clinical Nutrition. In addition, he is certified by the American Board of Nutrition.

Dr. Hursh has published a number of articles in scientific

Dr. Hursh has published a number of articles in scientific journals. He also writes about everyday nutrition problems in the newspaper and frequently broadcasts on the radio.

This copyrighted article was prepared for the National Dairy Council.

Risk Factors

Certain risk factors have been associated with greater likelihood of developing coronary disease. Risk factors are associations and not necessarily causes. However, coronary proneness seems to increase with every risk factor a person is exposed to. The risk factors are:

Family history—If either parent has a record of coronary disease, a person's chances of developing it are greater.

Sex—The disease is more common in men than women, until the age of about 55. Then incidence in women is about the same.

Age — Risk increases with age. Coronary heart disease is most common in late middle age. However, it is appearing increasingly earlier in life, particularly in men aged 35-45.

Smoking — A cigarette smoker runs about twice the coronary risk of a nonsmoker. A heavy cigarette smoker runs even greater risk.

Stress—It is difficult to know what creates "stress" in a person. The cave man, for instance, lived in continual fear of the sabertoothed tiger. Nowadays our enemy seems to be the very civilization we live in. The individual who finds it hard to keep up with today's pace of life runs more risk than the person who adapts to this pace.

Blood pressure—The coronary risk of a person with high blood pressure is much greater than the risk of a person with normal blood pressure. The risk is increased further if the person is also overweight.

Diabetes—Diabetic persons have increased risk, whether the diabetes develops early or later in life.

Overweight—This may be important because of its frequent association with high blood pressure and with diabetes. People who have gained weight as adults seem more likely to develop coronary disease than those who are overweight throughout life.

Lack of exercise—A sedentary person, such as an office worker, is more likely to suffer from heart disease than one whose life is more active. Inactivity also tends to increase body weight.

Blood cholesterol—Raised levels of the fatlike substance, cholesterol, in the blood have been associated with increased likelihood of coronary disease.

Blood triglyceride—Raised levels of the blood fat, triglyceride, are also related to increased likelihood of coronary disease.

Diet—The quality and quantity of food eaten may be related to the development of coronary disease. However, the exact nature of a "risky" diet is a matter of confusion and controversy.

We don't know the importance of diet compared to other risk factors. But the thought that coronary heart disease may be caused by eating the wrong food appeals to this nutrition-conscious nation. Diet is "news." It has become a

sensational topic in the press and on television. What do we really know about it?

Let's take a closer look at diet and heart disease. . . .

The Diet Debate

Cholesterol is a risk factor under close examination. It is a fat-like substance found in all parts of the body. In the diet it is obtained from foods of animal origin. It is also made in the body.

We cannot live without cholesterol — it is essential to the structure of every cell in the body. It is one of a group of chemicals called steroids. The body's important steroid hormones are made from cholesterol.

Can cholesterol be harmful? A raised level of cholesterol in the blood is one of the risk factors associated with coronary heart disease. Cholesterol is also one of the substances that accumulate in the artery in atherosclerosis. Perhaps for these reasons, the word "cholesterol" commonly arouses a chill of fear.

Many puzzling problems about cholesterol still remain to be explained. Does raised blood cholesterol cause atherosclerosis? Does cholesterol affect the development of blood clots? Coronary heart disease is known to occur even when blood cholesterol is normal or low.

What causes high blood cholesterol? We need to know whether raised blood cholesterol level is a cause of coronary heart disease. It is possible that raised cholesterol is a symptom—just as spots are a symptom of measles. There are, for instance, several known disorders of the blood where raised cholesterol is a side effect.

Cholesterol level in the blood seems to depend on several factors. Among these factors are genetic or family tendency, the amount of cholesterol in the diet, and also the kind of fat in the diet.

This is one of the ways our diet may be involved with heart disease.

Fat in our diet comes from two sources: visible fat — such as fat meat, cooking fat, butter and margarine, and invisible fat — in foods such as lean meat, milk, eggs. Fat is a concentrated energy source, giving us about 40 percent of our calories. It also carries important nutrients — vitamins A, D, E and K. Some fats provide essential fatty acids. Much of the enjoyment and satisfaction we get from food is due to the fat it contains, or the fat used in cooking.

About 15 years ago, researchers showed that some countries consuming large amounts of fat also had high death rates among men in their 50's. (Men of this age group are especially prone to deaths from coronary disease.) Attention was thus drawn to fat in the diet.

Population statistics cannot show cause and effect, but only associations. Countries where

fat is a large part of the diet, are rich countries, and as we have seen, there are many other differences in their ways of life that could be associated with coronary heart disease. For instance, there is a statistical association between coronary heart disease and the number of television sets in the population! It is also interesting that these rich countries with high fat consumption have the greatest overall life expecancy on earth.

How might fat be important in heart disease? There are two basic kinds of fat. Saturated fats are usually solid at room temperature and are found mostly in animal foods. Unsaturated fats are usually liquid at room temperature and are found mostly in vegetable foods. Highly unsaturated fats are called polyunsaturated fats.

Saturated fats tend to raise blood cholesterol level, while polyunsaturated fats tend to lower it. From this evidence alone, many people including some physicians and scientists, recommend changing the type of fat in everyone's diet. They hope that substituting polyunsaturated fats for saturated fats in the diet will lower blood cholesterol and thereby reduce risk of heart attack.

Are polyunsaturated fats desirable? So far, we know that inclusion of large amounts of polyunsaturated fats in the diet can lower blood cholesterol. But there is no conclusive evidence that risk of heart attack can also be reduced. Perhaps time will tell. Over the last 25 years, we have been buying more polyunsaturated fats instead of saturated fats. However, there has been no corresponding decline in coronary heart disease, as might have been hoped.

We don't know yet the possible long-term effects of eating large amounts of polyunsaturated fats. Research has shown, for example, that lowering cholesterol in the blood may just move it to another part of the body, such as the liver or skin. Much more research is needed before we can determine the full effect of polyunsaturates on the body.

We often get the impression from newspapers and magazines that saturated and polyunsaturated fats are bad guys and good guys, as if the case were proven. In the excitement of finding a "solution," we must remember that firm proof is still not available.

Meanwhile, research continues into other aspects of diet. . . .

Carbohydrate is another source of energy in the diet. Like fat, there is more than one kind of carbohydrate, such as starch and sugars. One kind of sugar in particular, sucrose (ordinary cane sugar) is thought by some to be related to coronary heart disease.

Sugar has attracted interest because its consumption has more than doubled since the turn of the century. This is a period in which there has been a great increase in deaths from heart disease. Again we cannot prove a cause and effect with these statistics, as our pattern of

life has changed in so many other ways during this time.

How might sugar be important in heart disease? One of the coronary risk factors is a raised level of the fat *triglyceride*, in the blood. If sugar is eaten in amounts not needed for energy, it is turned into triglyceride in the body. Sugar may raise blood triglyceride, just as saturated fat tends to raise blood cholesterol. However, more research on this is needed.

Investigation of carbohydrate in the diet is still a relatively new approach to studying coronary heart disease. Unlike cholesterol, triglyceride has not often been headline news. It would be just as mistaken at this stage to draw definite conclusions about sugar. However, this new evidence reminds us that we should keep an open mind about both saturated fats and sugar.

Single dietary components may be less important than other diet-related factors. . . .

Total calories in the diet may be related to coronary heart disease. Calories are the units in which energy value of the diet is measured. If more calories are consumed from food than are used up by physical activity, the extra calories are stored as fat, and a person may become overweight.

Overweight is associated with higher death rates from a number of causes. It is also a coronary risk factor. Overweight is often associated with other risk factors—diabetes, high blood pressure, raised blood cholesterol and raised blood triglyceride. Diet and inactivity act together to increase body weight, and it is difficult to know if one is more important than the other.

Can exercise help? Physical activity is beneficial as part of a weight control program. It may also have other benefits in reducing coronary risk. Regular exercise improves blood circulation in the whole body, including blood flow to the heart muscle. Blood cholesterol and triglyceride both tend to be lowered by sustained activity, and the tendency of the blood to clot is also reduced.

Meal patterns have changed over the last few decades. They seem to be of importance in addition to the kind and amount of food eaten. For instance, a harassed businessman today tends to eat little or no breakfast, a light hurried lunch and a large evening meal. Blood triglyceride is known to rise after eating a large quantity of food. Perhaps the body is not equipped to deal with the amount of food in a four-course dinner all at once, and converts it to fat (triglyceride) as an emergency measure.

Should I make changes in my diet? This is a difficult question. We still don't understand the role of diet and other risk factors in coronary heart disease. And in spite of volumes of research, we don't know enough about the importance of what we eat, how much we eat and when we eat.

Scientists and medical authorities disagree among themselves about what to recommend. Some consider that changes in the diet are already justified. There are those, too, who prefer to wait for more conclusive evidence.

Moderation seems to be the wisest course of action at the present time. This view is taken by the Food and Nutrition Board, National Academy of Sciences-National Research Council:

"In spite of the large amount of information accumulated in recent years about atherosclerosis and its pathogenesis, many gaps in knowledge remain. Results of recent studies, while valuable and thought provoking, do not provide sufficient data for firm recommendations for radical dietary changes. . . .

"Until we learn more about which fats are desirable nutritionally, the Board recommends that the American consumer should partake of the foods that make up a varied, adequate and not overly rich diet and maintain a normal body weight by judicious control of caloric intake and by daily exercise."

What is a good, moderate diet? We need to eat a good diet to be provided with all the nutrients essential for health. Each nutrient has certain special jobs in building, upkeep and operation of the body. Having an extra supply of one nutrient cannot make up for a shortage of another.

No single food contains a perfect balance of nutrients. But there are many kinds and com-

binations of food that will provide all the nutrients we need. A moderate diet is one where extremes are avoided; variety in food is the key to good nutrition.

Foods which supply important amounts of the same nutrients can be grouped together. The four food groups is a simple guide to planning nutritious meals and snacks. Here are the amounts recommended for an adult every day:

Milk Group — 2 or more glasses of milk. Cheese, cottage cheese, ice cream, and foods made with milk can be used as part of the milk allowance.

Meat Group — 2 or more servings. Eggs, poultry, fish, nuts, peanut butter, dried peas and dried beans (including baked beans) are also part of this group.

Fruit and vegetables — 4 or more servings. A citrus fruit, cantaloupe, strawberries or tomato should be one of the servings. Dark green or deep yellow vegetables or yellow fruits should be eaten at least every other day.

Bread and cereals—4 or more servings. This group includes whole grain or enriched bread, rolls, macaroni, spaghetti, ready-to-eat cereals, rice, tortillas.

Eating these foods every day is one way you can benefit your general health, and perhaps your heart too. But diet alone may not be enough. Cigarette smoking, inactivity and stress can also affect your chances of coronary heart disease.

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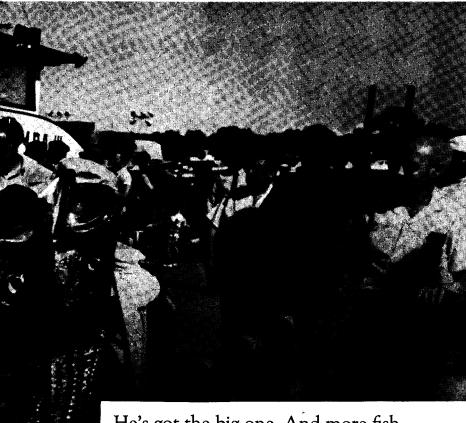
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Dosage of coumarin anticoagulants. may require adjustments during and

on cessation of glutethimide therapy.

Physical and Psychological

Dependence: Physical and psychological dependence have occurred. Prescribe cautiously for patients known to take excessive quantities of drugs. Limit repeated prescriptions without adequate medical supervision. Withdrawal symptoms include nausea, abdominal discomfort, tremors, convulsions, and delirium. Newborn infants of mothers dependent on glutethimide may also exhibit withdrawal symptoms. In the presence of dependence, dosage should be reduced gradually.

Pregnancy: Use of any drug in pregnancy or lactation requires weighing potential benefits against

hazards.

PRECAUTIONS: Total daily dosage above 1 Gm is not recommended for continued administration. In presence of pain, which may counteract the sedative effect of glutethimide, an analgesic should also be prescribed.
ADVERSE REACTIONS: With-

draw glutethimide if a generalized skin rash occurs. Rash usually clears spontaneously 2 or 3 days after withdrawal. Occasionally hemorrhagic or urticarial rash may occur. In recommended doses there have been rare reports of nausea, hangover, paradoxical excitation, and blurring of vision. Rarely, acute hypersensitivity reactions, porphyria, and blood dyscrasias. (thrombocytopenic purpura, aplastic anemia, leukopenia) have been

reported.

DOSAGE: To avoid oversedation, individualize dosage. Not recom-mended for children under 12.

Night-time sedation: 0.25 to 0.5 Gm at bedtime. Repeat dose if necessary, but not less than 4 hours

before arising.

Daytime sedation: 0.125 to 0.25
Gm t.i.d. after meals.

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First stage of labor: 0.5 Gm at
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John Dryden

Give your patients rest from pain

Empirin[®] Compound with Codeine Phosphate gr. 1/2, No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning – May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

B. W. & Co. narcotic products are Class "B", and as such are available on oral prescription, where State law permits.

Complete literature available on request from Professional Services Dept. PML.



BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.



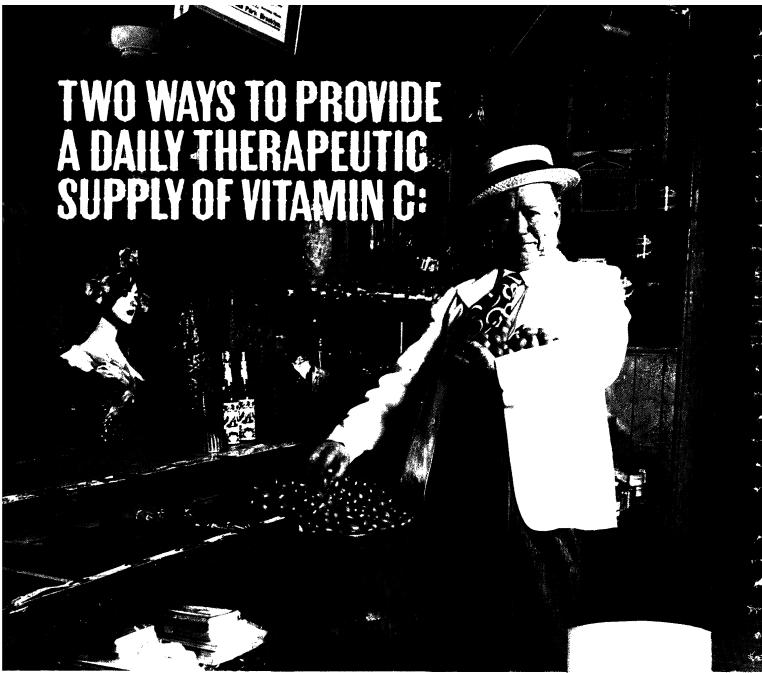
vacation in a vial: the spasm reactors in your practice deserve

"the Donnatal Effect"

	n tablet, capsule or f elixir (23% alcoho	each Donnatal	each Extentab®
hyoscyamine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
atropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
		(½ gr.) 32.4 mg. (¾	gr.) 48.6 mg.
(Warning: may be habi	t forming)		

Brief Summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

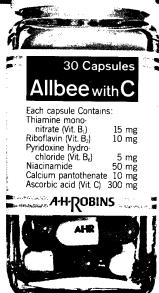




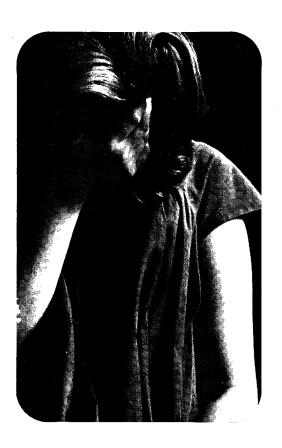
50 KUMQUATS OR ONE ALLBEE WITH C

Your patient would have to eat 1,500 kumquats a month, about 50 a day, to get as much Vitamin C as is contained in just one bottle of 30 Allbee with C capsules (taken one capsule daily). Allbee with C is a lot easier to come by too. Unlike kumquats, it's always in season. In addition, each capsule provides full therapeutic amounts of the B-complex vitamins. The handy bottle of 30 gives your patient a month's supply at a very reasonable price. Economy size of 100 also available. At pharmacies on your prescription or recommendation.

A. H. Robins Company, Richmond, Va. 23220



the common denominator in G.U. therapy



In G. U. therapy, the first consideration is control of infection. To your patient, a primary concern is relief from pain. URISED provides rapid relief from pain, and relaxation of smooth muscle spasm through parasympatholytic action of atropine and hyoscyamine.

URISED is not a dramatic "wonder drug" but a useful one that has served the medical profession for more than fifty years. You can rely on URISED; it has gained the confidence of physicians who have written more than one million prescriptions for their patients.

URISED is a mild but reliable agent with a low order of toxicity. It can be used alone to treat uncomplicated urinary tract infections where the invading organisms are susceptible to methenamine and methylene blue in an acid medium. URISED can provide "interim therapy" while awaiting complete laboratory diagnosis. It can also be used as an adjunct (to relieve pain and spasm) with almost any other form of antibacterial therapy).

For prompt relief of the distressing symptoms of pain, burning, frequency, dysuria, and spasm, consider URISED. Your patient will recognize its presence by the characteristic blue-green urine.

keeping your patient comfortable

PRECAUTIONS: Administer with caution to persons with known idiosyncrasy to atropine or cardiac disease.

SIDE EFFECTS: Neither irritation nor other untoward reactions have been reported; however, if pronounced dryness of the mouth, flushing, or difficulty in initiating micturition occur, decrease dosage. If rapid pulse, dizziness, or blurring of vision occur, discontinue use immediately. Acute urinary retention may be precipitated in prostatic hypertrophy.

CONTRAINDICATIONS: Glaucoma, urinary bladder neck or pyloric obstruction, duodenal obstruction and cardiospasm. Hypersensitivity to any of the ingredients.

DOSAGE: Adults—Two tablets, orally, four times per day followed by liberal fluid intake. Acute cases—Initially two tablets every hour for three doses followed by the recommended daily administration. Children—One-half the adult dose.

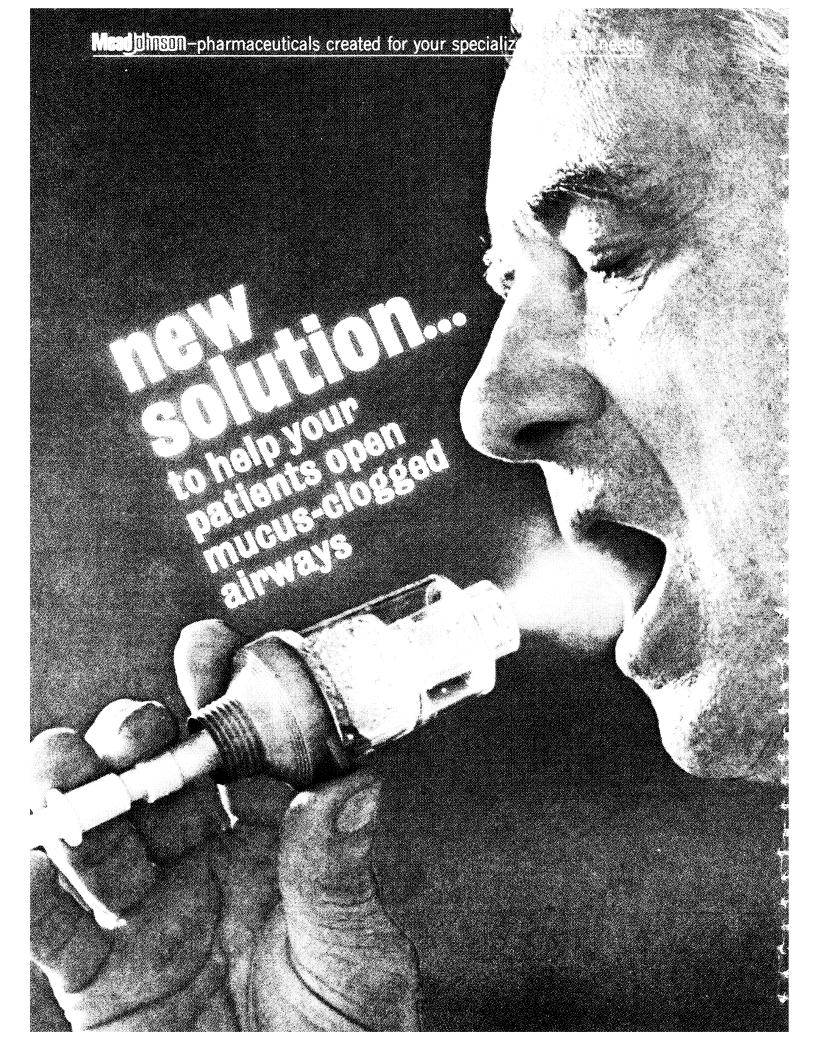
Stocked Nationally Through All Service Wholesale Druggists



Each blue-coated tablet contains active:

Atropine Sulfate . . 0.03 mg. Hyoscyamine . . . 0.03 mg. Methenamine . . . 40.8 mg. Methylene Blue ...5.4 mg. Phenyl Salicylate .18.1 mg. Benzoic Acid4.5 mg.





new 10% solution...

particularly convenient for home use

MUCOMYST-10 (ACETYLCYSTEINE)

liquefies thick, viscid mucus in chronic bronchitis and emphysema

Mucomyst, as 20% acetylcysteine, has been used with safety and effectiveness in hospitals for over five years.

Now a new 10% solution, Mucomyst-10, offers you the choice of prescribing a lesser concentration whenever you feel this is desirable. It provides added convenience and simplicity, particularly for your patients using nebulizing units at home.

By including Mucomyst-10 in the home management regimen, you can provide full mucolytic benefits for many of your patients with chronic bronchitis and emphysema complicated by tenacious secretions.

Indications: Mucomyst has been demonstrated to be clinically effective as adjuvant therapy in a wide range of conditions in which thick, viscous mucus is a problem, including: postoperative atelectasis and pneumonia; chronic bronchopulmonary disease (emphysema, chronic bronchitis, asthma, and bronchiectasis); acute bronchopulmonary disease (pneumonia, bronchitis, and tracheobronchitis); tracheostomy care; facilitation of bronchial studies; maintenance of an open airway during anesthesia; and to help control pulmonary complications of cystic fibrosis. Contraindications: Mucomyst is contraindicated in those patients who are sensitive or who have developed a sensitivity to it. Warnings: After proper administration of acetylcysteine, an increased volume of liquefied bronchial secretions may occur. When cough is inadequate, the open airway must be maintained by mechanical suction if necessary. When there is a large mechanical block due to foreign body or local accumulation, the airway should be cleared by endotracheal aspiration, with or without bronchoscopy. Asthmatics under treatment with Mucomyst should be watched carefully. If bronchospasm progresses, this medication should be immediately discontinued. Adverse Effects: Adverse effects have included stomatitis, nausea and rhinorrhea. Sensitivity and sensitization to Mucomyst have been reported very rarely. A few susceptible patients, particularly asthmatics (see Warnings), may experience varying degrees of bronchospasm associated with the administration of nebulized acetylcysteine. Most patients with bronchospasm are quickly relieved by the use of a bronchodilator given by nebulization. Administration & Dosage: Mucomyst may be administered by nebulization into a tent, Croupette, face mask, or mouthpiece; or by direct instillation. Mucomyst should not be placed directly into the chamber of a heated (hot-pot) nebulizer. Complete details on dosage, administration, and compatibility are included in the package insert. Additional information may be obtained from Mead Johnson Laboratories. Supplied: Mucomyst-10 (acetylcysteine), a sterile 10% solution, in vials of 10 ml. and 30 ml.; Mucomyst (acetylcysteine), a sterile 20% solution, in vials of 10 ml. and 30 ml.





other days she doesn't even try

In the treatment of depression, Aventyl HCl as part of your total therapy often brings early symptomatic improvement.

Aventyl HCl aids in renewing motor function and increasing interest in life. Patients may report that they eat more, enjoy undisturbed sleep . . . generally begin to function better. Relief from their most distressing symptoms helps them "open up" and ventilate their problems.

In depression AVENTYL HCI NORTRIPTYLINE HYDROCHLORIDE

Description: Aventyl HCl is a safe and effective agent for treatment of mental depression, anxiety-tension states, and psychophysiological gastro-intestinal disorders. It is not a monoamineoxidase (MAO) inhibitor.

In laboratory animals, anticholinergic effects of Aventyl HCl are milder than those of related antidepressants.

Indications: Depressive reactions (alone or accompanied by anxiety) associated with such presenting symptoms as depression, anxiety, tension, insomnia, restlessness, disinterest, and irritability.

Psychophysiological gastro-intestinal disorders and symptomatic reactions in childhood (e.g., enuresis).

Contraindications: Hypersensitivity to the drug; concurrent use with a MAO inhibitor or use within two weeks after the MAO inhibitor is discontinued.

Warnings: Use in convulsive or hypotensive states should be closely followed by the physician.

At present, data are insufficient to recommend the drug during pregnancy. The possibility of a suicidal attempt in a depressed patient should always be considered.

There have been rare reports of agranulocytosis, jaundice, hypotension, tremor, urinary retention, thrombocytopenic purpura, and paralytic ileus. Periodic laboratory studies are recommended.

Cardiovascular complications, including myocardial infarction and arrhythmias, have been reported occasionally with related drugs. Patients with cardiovascular disease should be given Aventyl HCl under close observation and in low dosage. This drug, like members of its group, tends to produce sinus tachycardia and to prolong the conduction time, as manifested by first-degree AV block.

Precautions: Because of its anticholinergic activity. Aventyl HCI should be administered cautiously in patients with glaucoma or a propensity for urinary retention. Use Aventyl HCI with care in conjunction with sympathomimetic or anticholinergic drugs. Epileptiform seizures or troublesome patient hostility may occur. Aventyl HCl used alone in schizophrenic patients may result in an exacerbation of the psychosis.

Concomitant use of Aventyl HCl and ECT (with or without atropine, short-acting barbiturate, and muscle relaxant) has not been thoroughly studied. If these treatments are used together, the physician should be aware of possible added adverse effects.

Patients should be warned about the possibility of drowsiness if they operate dangerous machinery or drive a vehicle. Concurrent ingestion of other C.N.S. drugs or alcohol may potentiate the adverse effects of Aventyl HCI.

Patients receiving a tricyclic antidepressant (e.g., nortriptyline) may respond poorly to hypotensive agents such as

Adverse Reactions: The following have been observed or reported following the use of Aventyl HCI: dryness of mouth, drowsiness, constipation, dizziness, tremulousness, confusional state, ataxia, disorientation and hallucinations, restlessness, weakness, precipitation of hypomanic or manic state, tachycardia, blurred vision, epigastric distress, sweating, peculiar taste, blacktongue, fatigue, excess weight gain or weight loss, insomnia, headache, paresthesia, nausea and vomiting, adynamic ileus, rash, itching, delayed micturition, hunger sensation, flushing, diarrhea, nocturia, inner nervousness, anxiety and panic, ankle and orbital edema, hypotension, hypertension, impotence, nightmares, palpitation, numbness, peripheral neuropathy, photosensitization, extrapyramidal symptoms, and increased or decreased libido.

Habituation or withdrawal symptoms have not been re-

Administration and Dosage: Aventyl HCl is administered orally as Pulvules® or liquid. Dosage should be individualized. The following general principles are applicable.

Aventyl HCl is preferably given in gradually increasing doses: 1 Pulvule (10 mg.) twice the first day, 1 Pulvule three times the second day, and 1 Pulvule four times daily there-

If neither beneficial nor adverse effects are seen after five to seven days with 10 mg. four times a day, the patient can be given 25 mg. twice the first day, 25 mg. three times the second day, and 25 mg. four times daily thereafter.

If minor side-effects develop, reduce the dosage. If side-

effects of a more serious nature or allergic manifestations develop, discontinue the drug.

For mild symptoms of a depressive nature, give 10 mg. three or four times a day; for severe depressions, 100 mg.

Dosages above 100 mg. daily seem to induce no greater degree of clinical response, but side-effects may increase.

Usual Recommended Dosage

ADULTS-20 to 100 mg. daily

Pulvules: 25 mg.-1 Pulvule one to four times daily 10 mg.—1 or 2 Pulvules one to four times daily

Liquid: 1 to 2 teaspoonfuls (5 to 10 cc.) one to four times daily

CHILDREN-1 to 2 mg. per Kg. or 10 to 75 mg. daily Pulvules: 25 mg.—Ages seven to twelve, 1 Pulvule one to three times daily

> 10 mg.—Ages three to six, 1 Pulvule one to three times daily

> > Ages seven to twelve, 1 or 2 Pulvules one to three times daily

Liquid: Ages three to six, 1 teaspoonful (5 cc.) one to three times daily

> Ages seven to twelve, 1 to 2 teaspoonfuls (5 to 10 cc.) one to three times daily

Maintenance medication is necessary until it is evident that the depression cycle has run its spontaneous course. This assumption may be based upon the history of previous depressions, the removal of the precipitating factors in the environment, or a recognition that the patient is able to manage his affairs. It is advisable to continue maintenance therapy for several months after improvement.

How Supplied: Liquid Aventyl® HCl (nortriptyline hydrochloride, Lilly), 10 mg. (equivalent to base) per 5 cc., in pint bottles.

Pulvules Aventyl HCI, 10 and 25 mg. (equivalent to base), in bottles of 100 and 500. [081668A]

Additional information available upon request.



ELI LILLY AND COMPANY • INDIANAPOLIS, INDIANA 46206

Sally Wilson has lost her reputation.

In the last week or so, Sally Wilson's year-old reputation as an unpredictable grouch has melted away.

She doesn't flare up and lash out at business or at home. She's been coming in on time and turning out more work. Sally's menopause had triggered symptoms that hormonal

therapy by itself apparently hadn't helped.

Now there's been marked improvement since her physician put her on adjunctive Valium (diazepam) 5-mg tablets q.i.d.

Valium has helped her relax.

She's less tense and taut; she's more friendly and cheerful and wants to be part of her world.

The menopause may be associated with excessive psychic

tension, agitation and depressive symptoms.

In such cases, Valium usually reduces the psychic tension and can encourage a more relaxed outlook, a healthier response to the stresses of everyday living, and help promote a sense of well-being.



Relieves psychic tension alone or associated with functional or organic disorders.

Calming effect usually prompt and pronounced.

Skeletal muscle-relaxant property enhances its value adjunctively in total management of selected patients.

On proper maintenance dosage seldom dulls the senses or interferes with function.

Generally well tolerated: most common side effects have been drowsiness, fatigue and ataxia.

No peripheral autonomic blocking effects and no extrapyramidal symptoms.

Flexible dosage—available as 2-mg, 5-mg, 10-mg tablets.

An h.s. dose added to t.i.d. dosage facilitates sleep in tension-induced insomnia.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may

require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

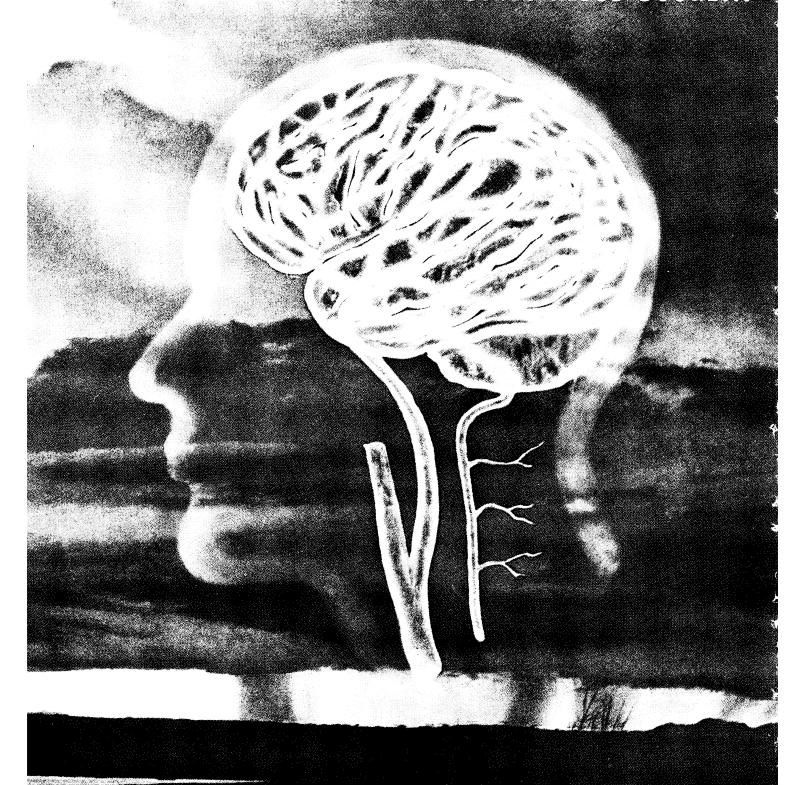
Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



Valium (diazepam)

useful in psychoneurotic states manifested by psychic tension with associated depressive symptoms genlar Disturbances occur...



...with episodes of vertigo, headache, confusion, sensory loss, slurred speech, consider

VASODILAN® (ISOXSUPRINE HCI)

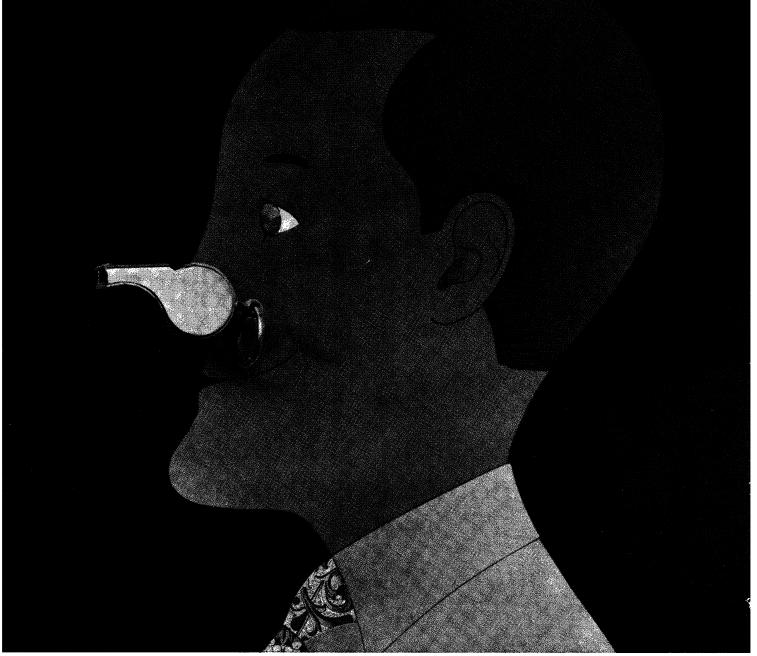
to help relieve symptoms by preventing vasospasm and increasing cerebral blood flow

New 20 mg. strength now available: Vasodilan 20 mg. tablets for greater dosage simplicity and convenience. Recommended *initial* dose: one 20 mg. tablet q.i.d.

Athough not all clinicians agree on the value of vasodilators in vascular disease, several investigators²⁻⁵ have reported favorably on the effects of isoxsuprine on cerebral blood flow. Effects have been demonstrated both by objective measurement^{2,5} and observation of clinical improvement.²⁻⁴

Indications: Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). Composition: VASODĪLAN tablets, isoxsuprine hydrochloride 10 mg. and 20 mg. Dosage: Oral—10 to 20 mg. t.i.d. or q.i.d. Contraindications and Cautions: There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. Side Effects: Occasional palpitation and dizziness can usually be controlled by dosage reduction. As intramuscular administration of 10 mg. or more may cause brief hypotension and tachycardia, single intramuscular doses exceeding this amount are not

and Cautions: I nere are no known contraindications to recommended oral dosage. Do not give immediately postpartum of in the presence of arterial bleeding. Side Effects: Occasional palpitation and dizziness can usually be controlled by dosage reduction. As intramuscular administration of 10 mg. or more may cause brief hypotension and tachycardia, single intramuscular doses exceeding this amount are not recommended. Complete details available in product brochure from Mead Johnson Laboratories. References: (1) Fazekas, J. F.; Alman, R. W.; Ticktin, H. E.; Ehrmantraut, W. R., and Savarese, C. J.: Angiology 15:No. 2 (Feb.) 1964. (2) Horton, G. E., and Johnson, P. C., Jr.: Angiology 15:70-74 (Feb.) 1964. (3) Clarkson, I. S., and LePere, D. M.: Angiology 17:190-192 (June) 1960. (4) Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. 4:124-128 (April) 1962. (5) Whittier, J. R.: Angiology 15:82-87 (Feb.) 1964. (a) 1970 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 75970



Nose clear as a whistle

(THANKS TO DIMETAPP*)

Dimetapp Extentabs® does an outstanding job of helping to clear up the stuffiness, drip and congestion of colds and upper respiratory allergies and infections. Each Extentab keeps working up to 12 hours. And for most patients drowsiness or overstimulation is unlikely. Try Dimetapp. It clearly works.

UP TO 12 HOURS CLEAR BREATHING ON ONE TABLET

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

FOR UPPER RESPIRATORY ALLERGIES AND INFECTIONS

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.

Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy. Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.

Dosage: 1 Extentab morning and evening.

Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPANY

RICHMOND, VA. 23220

*Best, C. H. and Taylor, N. B.: The Physiological Basis of Medical Practice, 7th edition, Williams and Wilkins, Baltimore, 1961, p. 480.

...to reduce the hemodynamic "bind" of constipation in congestive heart failure

Constipation in the chronic heart failure patient carries with it the ever-present threat of acute cardiac decompensation while straining at stool. In the already weakened, distended heart, a sudden influx of blood on termination of the Valsalva maneuver is considered to be the mechanism of some of the deaths occurring in these cardiac patients during straining efforts.*



Doxidan is a gentle laxative designed to free your patient from the hemodynamic consequences of straining at stool. With a fecal softening agent to keep the stool soft and easy to evacuate, and with just enough peristaltic stimulation to urge the sluggish bowel, Doxidan reduces the hemodynamic "bind" of constipation.

Composition: Each capsule contains 50 mg. danthron N.F. and 60 mg. dioctyl calcium sulfosuccinate.

Dosage: Adults and children over 12—one or two capsules daily. Children 6 to 12—one capsule daily. Give at bedtime for two or three days or until bowel movements are normal.

Supplied: Bottles of 30, 100 (FSN 6505-074-3169) and 1000 (FSN 6505-890-1247).



virtually 100% effective in external otitis of bacterial or fungal etiology

Within seconds, VoSoL is cidal against all pathogens associated with external otitis and provides such specific advantages as

• rapid anti-inflammatory, anti-infective, anti-pruritic action ● rarely sensitizing, hypo-allergenic, non-toxic, no risk of neomycin sensitivity reaction ● virtually no side effects ● no interference with otoscopic examination since it does not obscure anatomic landmarks ● proven efficacy in both treatment and prevention of external otitis as reported in over 5,000 cases, published in numerous studies, with over 95% good to excellent results

INDICATIONS: VõSoL: For the treatment and prevention of otitis externa. VõSoL HC. Indicated when the otitis is complicated by inflammation or when the otitis is associated with seborrheic dermatitis, allergic eczema, psoriasis or other non-infectious conditions. SUGGESTED METHOD OF TREATMENT:

1. Carefully remove all cerumen and debris. This is important because it allows immediate contact to infected surfaces. 2. To promote continuous contact, insert a VôSoL or VôSoL HC saturated wick in the ear with instructions to the patient to keep wick moist for the next 24 hours by occasionally adding a few drops on the wick. 3. Remove wick after first 24 hours and continue to instill 5 drops of VõSoL or VõSoL HC 3 or 4 times daily thereafter.

4. During treatment to prevent infection of other ear, use VõSoL or VõSoL HC in unaffected ear 3 times daily. PRECAUTIONS: As safety of topical steroids during pregnancy has not been confirmed, they should not be used for an extended period during pregnancy. Systemic side effects may occur with extensive use of steroids. CONTRAINDICATIONS: As with all drugs, sensitivity to any of the constituents of these preparations is a contraindication to their use; perforated tympanic membranes are frequently considered a contraindication to the use of external ear canal medication. AVAILABILITY: VõSoL 15 c.c.

WAMPOLE LABORATORIES
Stamford, Connecticut 06904

Div. Denver Chemical Mfg. Co. In Canada: DENVER LABS (Canada) Ltd., Toronto

VoSoL

Otic Solution

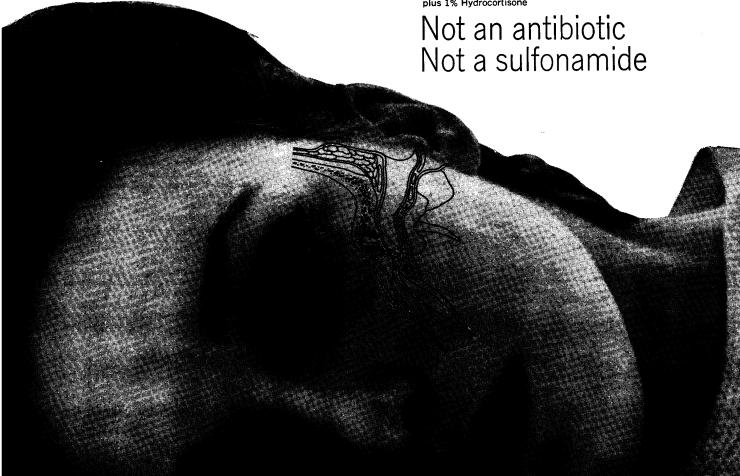
Ingredients:
1,2-propanediol diacetate
acetic acid
benzethonium chloride
in a propylene glycol vehicle
containing 0.015% sodium acetate.

3.0% 2.0% 0.02%

When otitis is complicated by inflammation or other non-infectious conditions prescribe

$ar{ ext{VoSoL}}$ HC

Otic Solution
Ingredients of VōSoL
plus 1% Hydrocortisone



Obesity Oddities



Control food and mood all day long with a single morning dose

AMBAR[#]2

EXTENTABS® methamphetamine HCl 15 mg., phenoarbital 64.8 mg. (1 gr.) (Warning: may be habit forming

A. H. ROBINS COMPANY RICHMOND, VA. 23220 A-H-ROBINS

One Ambar Extentab before breakfast can help control most patients' appetites for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety... helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the will power during periods of dieting.

BRIEF SUMMARY/Indications: Ambar suppresses appetite and helps offset emotional reactions to dieting.

Contraindications: Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. Precautions: Administer with caution in the presence of cardiovascular disease or hypertension. Side Effects: Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

Also available: Ambar #1 Extentabs®
— methamphetamine hydrochloride
10 mg., phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

PHYSICIANS WANTED

ORTHOPEDIC SURGEON—Capital city of Alaska; must be Board certified or eligible; new \$5 million community hospital and adjacent PHS clinic under construction; competent, congenial medical staff which includes general practitioners, specialists in internal medicine, pediatrics, anesthesiology, general surgery, cardio-vascular and thoracic surgery; private practice locally will serve referred patients from other areas Southeast Alaska; clean air, mild climate, excellent schools, unlimited opportunities for outdoor living—skiing, boaring, hunting, salmon and trout fishing. Write Administrator, Great Juneau Borough Hospital, Juneau, Alaska 99801.

LOCUM TENENS

WANTED—Central San Joaquin Valley, small town, general practice. No OB and little surgery. Well staffed and well equipped office. Spanish helpful. Two-four weeks summer 1970, \$500.00 per week. Send application to Box 9213, California Medicine.

BOOKS

WHO SHALL LIVE? Man's Control Over Life and Death. A brief, thoughtful study by a group of Quaker doctors of the moral and religious issues raised by scientific advances in the control of birth and death. The report explores abortion, contraception, prolongation of life in the dying. Excellent as a summary of these questions. \$1.75 paperback. Available at 2160 Lake Street, San Francisco, Ca. 94121.

SITUATIONS WANTED

RADIOLOGIST returning from Vietnam and military service this summer desires to locate in California. Fully trained—Board Certified—California license. Box 9214, California Medicine.

RADIOLOGIST available for Locums Coverage: Board eligible, trained four years at University of California Medical Center in San Francisco. Experienced in general radiology, special procedures and therapy. Single, will travel and available through October, 1970. Mel Okeon, M.D., 172 Bulkley, Sausalito, Calif. 94965.

ORTHOPEDIC ASSISTANT — Certified, desires to associate with a group of surgeons or hospital. Serve as scrub nurse, apply and remove cast, traction, remove sutures, change dressing, etc. References. Salary \$600.00 per month. George Holcomb, 1439 - 57th Avenue, Oakland, Ca. 94621.

ASSOCIATES WANTED

YOUNG GENERAL PRACTITIONER—A.A.G.P. to associate with two active M.D.'s (One F.A.C.S.), strictly general practice, in desirable coastal town with population area of 25,000; excellent opportunity. Hospital soon to be built, open staff policy. Well-equipped offices, pro-rated expenses. Box No. 845, California Medicine.

EXCELLENT OPPORTUNITY FOR INTERNIST to share space in new office. Well equipped, good location. Excellent private hospital facilities. Terms available. Write or call W. Christie, M.D., 877 West Fremont, Sunnyvale, Ca. 94087. (408) 736-8100.

VACATION RENTAL

HOUSEBOAT FUNI On 1,000 scenic miles of Sacramento-San Joaquin Delta Waterways. Cruise, swim, ski, fish or simply relax. Deluxe houseboats equipped for 6-8. Full galley. Hor water and showers. Railed walkway around cabin. For free color brochure write Holiday Flotels-Delta, Box CM8771, Stockton, Ca. 95204. Phone: (209) 477-9544.

NORTHWEST SAILING VACATION—Six days aboard 60' Garden Sailing Ketch through the 172 evergreen San Juan Islands, with skipper. Learn to sail—gather clams and oysters, rest and relax. Diesel motor, radio-telephone, refrigeration and hot shower. Come alone or with party. Not over six guests, party of four may have exclusive. \$150 per person pays for everything. Write for picture brochure. Chris Wilkins, Orcas, Washington 98280.

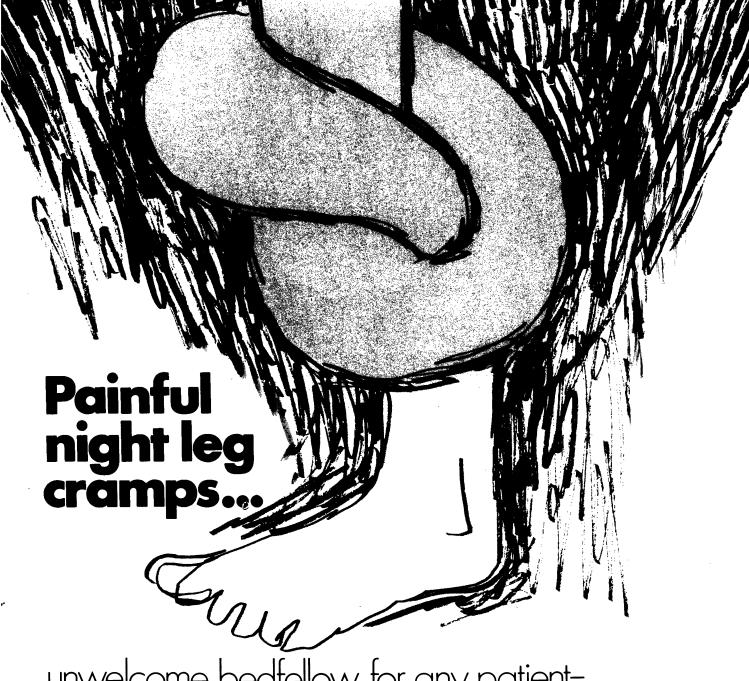
HAWAAIAN (Manalei, Kauai) Vacation beach home for only \$500.00 per month. Old Hawaiian atmosphere, away from crowded beaches. Excellent skin diving, swimming and beaches. Available May, September 1970 through May 1971, inclusive. Weekly rate \$150.00. For details, pictures and information write California Medicine, Box 9194.

(Continued on Page 59)

TOU CAN BUILD A BRIOGE FOR \$4 SPECIAL PRICE!

Send CALIFORNIA MEDICINE to a Student, Intern or Resident. Here is a warm, practical and appropriate way to open communications between you and those who soon will join you in shaping the now and the future of your profession.

(Name)	(Address)	(City)	(Zip)
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unwelcome bedfellow for any patientincluding those with arthritis, diabetes or PVD

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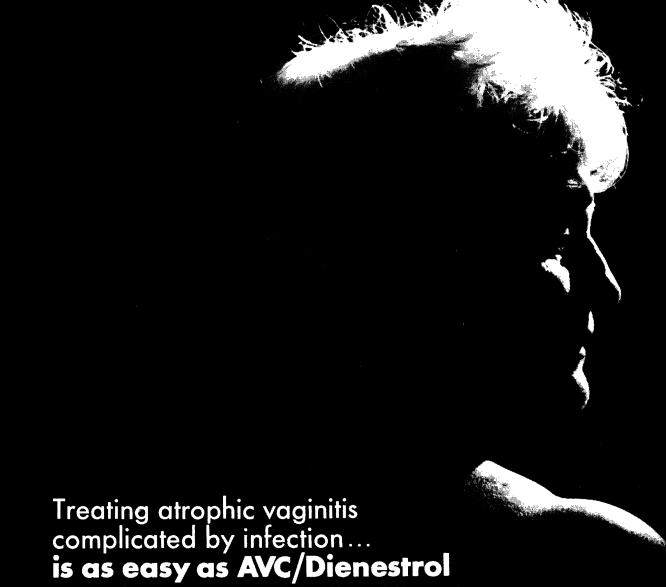
Prescribing Information — Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. Indications: For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. Contraindications: QUINAMM is contraindicated in pregnancy because of its quinine content. Precautions/Adverse Reactions: Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. Dosage: One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. Supplied: Bottles of 100 and 500 tablets.



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Quince sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps



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— helps stimulate the restoration of normal vaginal epithelium to resist infection.

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Dosage: One applicatorful or one suppository intravaginally

once or twice doily.

Supplied: 'AVC/Dienestrol Cream'—Four ounce tube with applicator. 'AVC' and 'AVC/Dienestrol Suppositories'—Box of 12 with applicator.

12 with applicator. **References:** (1) Solerno, L. J., Ortiz, G., and Turkel, V.:

Vaginitis: A Diagnostic and Therapeutic Approach, Scientific
Exhibit, presented at the 115th Annual A.M.A. Convention.

Chicago, Illinois, June 1966. (2) Nugent, F. B., and Myers,
J. E.: Pennsylvania Med. 69:44, 1966.



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Cream (dienestrol .01%, sulfanilamide 15.0%, aminacrine hydrochloride 0.2%, allantoin 2.0%) Suppositories (dienestrol 0.70 mg., sulfanilamide 1.05 Gm., aminacrine hydrochloride 0.014 Gm., allantoin 0.14 Gm.)



help protect your angina patients with ISORDIL SUBL (ISOSORBIDE DINITRATE)

Prescribe ISORDIL SUBLINGUAL (5-mg. tablets) for treatment of acute attacks or for prophylaxis when increased physical or emotional stress place an additional burden on your angina pectoris patients. ISORDIL SUBLINGUAL acts almost as fast as nitroglycerin, yet lasts hours longer. Reliable because it's stable

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INDICATIONS: Sublingual—for prevention and treatment of angina pectoris.

Oral—for relief of angina pectoris (pain of coronary artery disease); the oral dosage forms are not intended to abort the acute anginal episode, but are widely regarded as useful in the prophylactic treatment of angina pectoris. CONTRAINDICATION: Idiosyncrasy to this drug.

WARNING: Data supporting the use of nitrites during the early days of the

acute phase of myocardial infarction (the period during which clinical and laboratory findings are unstable) are insufficient to establish safety.

PRECAUTIONS: Intraocular pressure is increased; therefore, caution is required in administering to patients with glaucoma. Tolerance to this drug and cross-tolerance to other nitrites and nitrates may occur. In patients with functional or organic gastrointestinal hypermotility or malabsorption syndrome, it is suggested that either the ISORDIL ORAL 5 mg. or ISORDIL 10 mg. oral tablet or ISORDIL SUBLINGUAL be the preferred therapy. The reason for this is that a few patients have reported passing partially dissolved ISORDIL TEMBIDS in their stools. This phenomenon is believed to be on the basis of physiologic variability and to reflect rapid gastrointestinal transit of the sustained action tablet. ISORDIL TEMBIDS should not be chewed.

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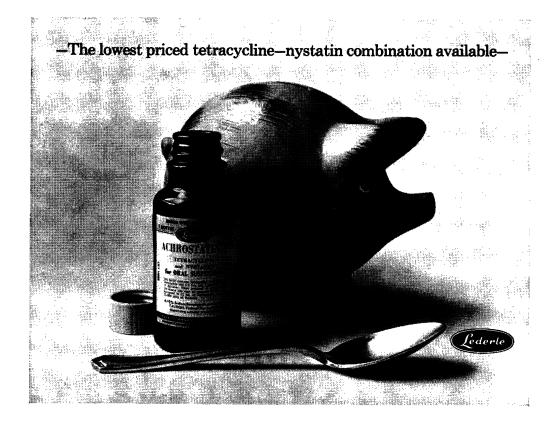
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(Continued from Page 54)

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- nearly 90% of more than 1500 patients healed completely or nearly completely, based on a composite evaluation of case reports in which this agent was part of the treatment regimen.
- approximately 93% of the patients had remission of symptoms in less than 3 days.
- approximately 50% of these patients had remission of symptoms in less than 1 day.

the only otic formula containing colistin sulfate, an antibiotic markedly bactericidal against pseudomonas...

the predominant pathogen in otitis externa. Formulated specifically to control the infection, inflammation and pruritus commonly encountered in otitis externa.

Each ml. provides:

Colistin base activity (as the	3.0 mg.	
Neomycin base activity (as the	sulfate)	3.3 mg.
Hydrocortisone acetate	10.0 mg.	(1%)
Thonzonium bromide	0.5 mg.	(0.05%)

Also contains polysorbate 80, acetic acid and sodium acetate in a buffered (pH 5) aqueous vehicle and thimerosal 0.002% as a preservative.

Buffered to pH 5 to reduce the abnormal alkaline pH which may be favorable to bacterial growth, and to help restore the normal pH of the ear canal.

in otitis externa, comprehensive Coly_{*}Mycin[®] S

Otic with Neomycin and Hydrocortisone (colistin suifateneomycin sulfate—thonzonium bromide—hydrocortisone acetate otic suspension)

Indications: Coly-Mycin S Otic with Neomycin and Hydrocortisone (colistin sulfate - neomycin sulfate thonzonium bromide - hydrocortisone acetate otic suspension) is indicated in the treatment of acute and chronic external otitis due to or complicated by bacterial and/or fungal infections caused by susceptible organisms. It is also indicated for the prophylaxis of "swimmer's ear." Contraindication: A history of sensitivity to any of the components or in tubercular, fungal and most viral lesions, especially herpes simplex, vaccinia and varicella. Precautions: If sensitivity or irritation occurs, medication should be discontinued promptly. Overgrowth of resistant organisms is possible. Use with care in cases with perforated eardrum or in long standing otitis media because of the possibility of ototoxicity caused by neomycin. There are articles in the current medical literature that indicate an increase in the prevalence of persons sensitive to neomycin. Adverse Reactions: A low incidence of mild burning or painful sensation in the ear has been reported. Such local effects do not usually require discontinuance of medication. Sensitivity reactions were reported in a few instances. Administration and Dosage: After the ear has been completely cleansed and dried, Coly-Mycin S Otic with Neomycin and Hydrocortisone should be instilled (a sterile dropper is provided) into the canal or applied to the surface of the affected ear. Shake the suspension well before using. The recommended therapeutic dosage of Coly-Mycin S Otic with Neomycin and Hydrocortisone is four (4) drops, 3 times a day; prophylactically, four (4) drops before and after swimming. Until acute pain has subsided, it may be preferable or necessary in some patients to pack the ear with a cotton wick saturated with Coly-Mycin S Otic with Neomycin and Hydrocortisone. The wick should be kept wet at all times. The patient should be instructed to avoid contaminating the dropper, especially with the fingers. Coly-Mycin S Otic with Neomycin and Hydrocortisone is stable for eighteen (18) months at room temperature; however, prolonged exposure to higher temperatures should be avoided. How Supplied: Coly-Mycin S Otic with Neomycin and Hydrocortisone is available in bottles containing 5 ml. or 10 ml. Each ml. contains 3 mg. of colistin base activity (as the sulfate), 3.3 mg. of neomycin base activity (as the sulfate), 10 mg. of hydrocortisone acetate, 0.5 mg. of thonzonium bromide, polysorbate 80, acetic acid and sodium acetate. A small amount (0.02 mg./ml.) of thimerosal has been added as a preservative. Each package contains a sterile dropper. Full information is available on request.



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The efficiency of Pro-Banthīne—its favorable balance of therapeutic and secondary actions—has been thoroughly tested and observed. This quality has been demonstrated surgically, roentgenographically, cinegastroscopically and, above all, clinically.

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For years Pro-Banthīne has been the most widely used anticholinergic medication for calming the gastrointestinal tract—for suppressing secretion, prolonging the action of antacids and providing the proper environment for healing peptic ulcers.

These established therapeutic actions make Pro-Banthīne particularly useful in:

- peptic ulcer
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- diverticulitis
- irritable colon
- biliary dyskinesia
- functional hypermotility

We wish to thank Drs. Marcia K. Bilbao, Louis H. Frische, Josef Rösch and Charles T. Dotter for this exceptionally graphic example of hypotonic duodenography.

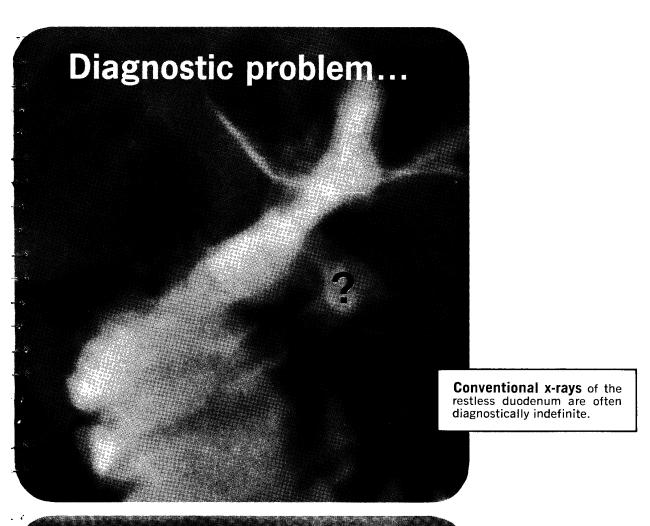
Contraindications: Glaucoma, severe cardiac disease.

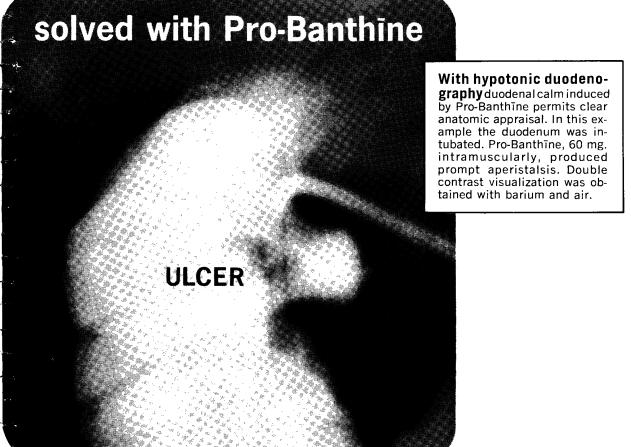
Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal dosage tolerated without excessive side effects is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two 15-mg. tablets four to six times daily may be required. Pro-Banthīne (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

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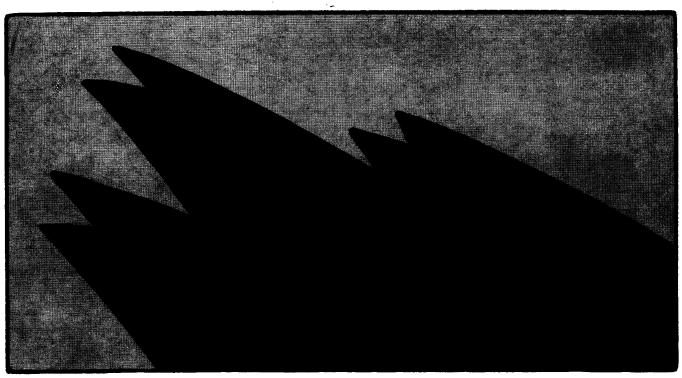




anxiety: the aggressor

Unless dealt with promptly, excessive anxiety can move in and take over the anxious patient's thinking and behavior, disrupting normal ability to function. In many patients, such anxiety can contribute to illness, exacerbate symptoms and retard recovery.

The antianxiety action of Librium (chlordiazepoxide HCl)—used adjunctively or alone—has demonstrated clinical usefulness in virtually every field of medical practice where anxiety complicates the patient's condition.



for the patient overwhelmed by anxiety Librium° (chlordiazepoxide HCl) 5-mg, 10-mg, 25-mg capsules

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-

prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated. carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective

measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

